



Kevin Scott
Project Manager

March 19, 2012

Mr. Eric Daly
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U.S. Environmental Protection Agency Region 2
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**Subject: Amended Draft Sampling Trip Report for the Riverside Avenue Site
Newark, Essex County, New Jersey
Contract: EPA Region 7 START, Region 2 Crossover
Contract No. EP-S7-06-01
Task No. 9004L100178000**

Dear Mr. Daly:

Tetra Tech EM Inc. (Tetra Tech) is submitting the amended draft sampling trip report for the Riverside Avenue site located at Riverside Avenue in Newark, New Jersey. The trip report summarizes the test pit sampling activities conducted at the site from January 25 through January 27, 2012 and includes a discussion of the sample results. If you have any questions regarding this report, please contact me at (302) 283-2248 or kevin.scott@tetratech.com.

Sincerely,

Kevin Scott
Project Manager

Enclosure
cc: TDD File

**DRAFT SAMPLING TRIP REPORT
RIVERSIDE AVENUE SITE
NEWARK, ESSEX COUNTY, NEW JERSEY**

Prepared for

U.S. Environmental Protection Agency Region 2
Emergency and Remedial Response Division
2890 Woodbridge Avenue
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Prepared by

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EPA Contract No. EP-S7-06-01

Task No. 9004L100178000

March 19, 2012

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1.0 INTRODUCTION

Under Region 7 Superfund Technical Assessment and Response Team (START) Contract No. EP-S7-06-01, Task No. 9004L100178000, U.S. Environmental Protection Agency (EPA) Region 2 tasked Tetra Tech EM Inc. (Tetra Tech) to conduct a removal assessment at the Riverside Avenue site, located in Newark, Essex County, New Jersey. Results from this investigation will be used to determine the nature and extent of soil contamination in the vicinity of the underground storage tank (UST) farm at the site. All sampling was completed in accordance with the site-specific abbreviated sampling and analysis plan (SAP) and quality assurance project plan (QAPP) prepared for the site (Tetra Tech 2012a, 2012b).

Information collected during this investigation will be used to determine if hazardous substances that might pose a significant risk to public health or the environment are present at the site and if remediation is warranted under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and the Superfund Amendments and Reauthorization Act of 1986 (SARA).

This trip report provides site background information in Section 2.0, describes sampling activities in Section 3.0, and summarizes observations and conclusions from the investigation in Section 4.0. All references cited in this trip report are listed after the text. The appendices include figures illustrating the site and test pit locations associated with this investigation in Appendix A; tables in Appendix B; photographic documentation of site activities in Appendix C; and field logbook notes, and chain-of-custody records in Appendix D and E, respectively.

2.0 BACKGROUND

This section describes the site location and layout, presents a site description, discusses the site's history, and summarizes previous investigation activities conducted on and in the vicinity of the Riverside Avenue site.

2.1 SITE LOCATION AND LAYOUT

The Riverside Avenue site is located off of McCarter Highway (New Jersey Route 21) on Riverside Avenue in Newark, New Jersey, as shown on Figure 1, Site Location Map, in Appendix A. The site is identified in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) as being located at 29 Riverside Avenue. The geographic coordinates for the approximate center of the site are 40° 45' 56.52" north latitude and 74° 9' 32.7594" west longitude. The area being investigated covers approximately 1/10 of 1 acre (5,000 square feet) on Lot 64 (Block 614) where 10 underground tanks are buried as shown on Figure 2, Site Layout Map, in Appendix A. Lot 64 is owned by the

City of Newark, New Jersey. The area of investigation is bordered by commercial properties to the north, by the Passaic River to the east, by commercial properties to the south, and by the Norfolk Southern Railroad, McCarter Highway (New Jersey Route 21), and Riverside Avenue to the west. Access to the site is through Riverside Avenue.

2.2 SITE DESCRIPTION

The Riverside Avenue site is a former PPG paint manufacturing facility located in an industrial area of Newark, New Jersey. Two buildings located on the property have been investigated: Buildings 7 and 12. Building 7 is a three-story building that contains approximately one hundred 3,000 to 10,000-gallon aboveground storage tanks (AST) and two subsurface impoundments (sub-basements), and Building 12 is a five-story building containing two abandoned 10,000-gallon ASTs containing hazardous waste. Previous field investigations have confirmed the presence of ten 12,000-gallon underground storage tanks (UST) containing hazardous substances, primarily volatile organic compounds (VOC), buried in the central portion of the site (Lockheed Martin 2010a). The area surrounding the ten 12,000 UST is the focus of this removal assessment. Figure 2, Site Layout Map, in Appendix A shows the locations of Buildings 7 and 12, and the 12,000-gallon USTs in the center of the site.

Site soil is composed of fill material that was used to create land adjacent to the Passaic River (U.S. Geological Survey [USGS] 1955).

2.3 SITE HISTORY

Based on existing Sanborn Fire Insurance maps, the site has been used for industrial activities from 1909 through 1983. Various operators used the property for the manufacture of paints and varnishes. From 1931 to 1950, PPG conducted operations on approximately 7 acres along the western shore of the Passaic River. From approximately 1950 through 1973, the size of the operations decreased. Various tenants have occupied the property from 1973 through 1993. In 1993, the City of Newark obtained portions of the site through foreclosure (Weston Solutions, Inc. [Weston] 2009; Sanborn Maps 1909, 1931, and 1950).

2.4 PREVIOUS SITE INVESTIGATIONS

In May 2009, Weston completed a preliminary assessment (PA) for the City of Newark as part of the New Jersey Department of Environmental Protection (NJDEP) remediation program. During the PA, Weston investigated Buildings 7 and 12 located in the central portion of the Riverside Avenue site, and the property surrounding the buildings. While conducting the PA, Weston identified several areas of concern (AOC) based on Sanborn maps. The AOCs included ASTs, USTs, and underground piping (Weston 2009). In August and October 2009, Birdsall Services

Group Inc./PMK Group, Inc. (Birdsall) completed a site inspection (SI) at the site to investigate possible contamination from the AOCs. Birdsall also has a geophysical survey completed for the site. The survey identified possible USTs located east of Building 12. Subsequently, 10 USTs were confirmed to be present at this location (Birdsall 2009).

During the SI, A total of 17 soil borings were installed and 23 soils samples were collected. The soil samples were analyzed for total petroleum hydrocarbons (TPH) and priority pollutants. Analytical results from soil samples collected from areas surrounding the identified AOCs contained TPH in every sample; VOCs benzene, toluene, and ethylbenzene in about 12 samples; several semivolatile organic compounds (SVOC) in every sample; lead in every sample; and polychlorinated biphenyls (PCB) in seven samples. SVOC and lead contamination are present in soil throughout the area sampled.

EPA Region 2 requested the EPA Environmental Response Team (ERT) conduct a subsurface investigation of a portion at the Riverside Avenue site. On May 26 and 27, 2010, ERT collected 24 subsurface soil samples from 12 soil borings, 12 groundwater samples from the soil boring locations, and six sediment samples from the Passaic River adjacent to 29 Riverside Avenue (Lockheed Martin 2010a).

The analytical results from the 2010 subsurface investigation identified SVOCs in the 24 soil and six sediment samples collected from the site and the Passaic River, respectively. The most prevalent SVOCs detected in soil include benzo(a)anthracene (up to 4.9 milligrams per kilogram [mg/kg]), benzo(b)fluoranthene (up to 3.3 mg/kg), benzo(k)fluoranthene (up to 4.5 mg/kg), benzo(a)pyrene (up to 4.1 mg/kg), and indeno(1,2,3-cd)pyrene (up to 1.9 mg/kg). Lead was detected in 19 of the 24 soil samples at concentrations up to 4,700 mg/kg. Benzene was detected in two soil samples at concentrations up to 2.9 mg/kg. The sediment samples contained the same SVOCs detected in the soil samples including benzo(a)anthracene (up to 5.2 mg/kg), benzo(b)fluoranthene (up to 4.3 mg/kg), benzo(k)fluoranthene (up to 2.1 mg/kg), benzo(a)pyrene (up to 4.6 mg/kg), and indeno(1,2,3-cd)pyrene (up to 1.8 mg/kg). Lead also was detected in all sediment samples, with a maximum concentration of 21,000 mg/kg (Lockheed Martin 2010a).

Groundwater samples collected during the 2010 subsurface investigation contained notable concentrations of lead in nine of the 12 groundwater samples collected from the soil borings on site, with a maximum concentration of 16 micrograms per liter ($\mu\text{g}/\text{L}$). Other contaminants found in the groundwater samples included benzene (up to 16 $\mu\text{g}/\text{L}$); m,p,o-xylene (up to 1,400 $\mu\text{g}/\text{L}$); methylene chloride (up to 110 $\mu\text{g}/\text{L}$); naphthalene (up to 6.1 $\mu\text{g}/\text{L}$); and 2-methylnaphthalene (8.8 $\mu\text{g}/\text{L}$) (Lockheed Martin 2010a).

In October 2009, NJDEP responded to a spill into the Passaic River from two tanks in the basement of Building 12 on the Riverside Avenue site. The spilled material was characterized as waste solvent and fuel (NJDEP 2009). In response to the spill and the presence of contamination identified during the May 2010 SI, the EPA removal program began removal actions at the site. The actions included surface and subsurface soil sampling, groundwater sampling, and waste characterization (Lockheed Martin 2010b).

Under EPA Region 7 START Contract No. EP-S7-06-01, Technical Direction Document (TDD) No. 0178, EPA Region 2 tasked Tetra Tech to conduct a site removal assessment at the Riverside Avenue site in June 2010. Tetra Tech completed the following tasks during this removal assessment:

- Inventoried and collected liquid and/or residual solid samples from tanks located on the second and third floors of Building 7
- Collected aqueous and sediment samples from the basements of Buildings 7 and 12 where pooled water has accumulated
- Inventoried and sampled drums and containers located on site
- Collected samples of red and blue-colored dry pigment materials located on the floor of Building 12
- Collected samples of the tar/resin-like materials leaching from the west bank of the Passaic River and observed along the base of the north wall of Building 7
- Packaged and shipped samples to laboratories procured through the EPA Contract Laboratory Program (CLP) for target compound list (TCL) and toxicity characteristics leaching procedure (TCLP) VOCs, SVOCs, pesticides, and PCBs and TAL and TCLP metals and cyanide (Tetra Tech 2010)

The sub-basement sediment samples contained acetone up to 11,000 micrograms per kilogram ($\mu\text{g}/\text{kg}$); chloroform up to 2,200 $\mu\text{g}/\text{kg}$; 1,3-dichlorobenzene up to 290,000 $\mu\text{g}/\text{kg}$; methylene chloride up to 220,000 $\mu\text{g}/\text{kg}$; tetrachloroethene up to 280,000 $\mu\text{g}/\text{kg}$; 1,1,1-trichloroethane up to 1,100,000 $\mu\text{g}/\text{kg}$; and 2-methylphenol up to 4,700,000 $\mu\text{g}/\text{kg}$. The tank wastes contained acetone up to 1,100 $\mu\text{g}/\text{kg}$, methylene chloride up to 560 $\mu\text{g}/\text{kg}$, and xylene up to 630 $\mu\text{g}/\text{kg}$. Resin from the pipes contained ethylbenzene up to 150,000 $\mu\text{g}/\text{kg}$, isopropylbenzene up to 7,700 $\mu\text{g}/\text{kg}$, and m,p-xylene up to 65,000 $\mu\text{g}/\text{kg}$. Samples were collected from pigments found in containers and on the floor. The pigments contained acetone up to 710 $\mu\text{g}/\text{kg}$, methylene chloride up to 300 $\mu\text{g}/\text{kg}$, toluene up to 4,300 $\mu\text{g}/\text{kg}$, and lead up to 143 mg/kg (Tetra Tech 2010).

Previous investigations of the Riverside Avenue site have only been conducted in the central portion of the site near Buildings 7 and 12. However, PPG operations were located north and

south of the central portion of the site. No samples have been previously collected from the northern and southern portions of the former PPG operational areas. In November and December 2011, EPA START Region 7 contractor Tetra Tech collected surface soil, subsurface soil, and groundwater samples from the northern and southern portions of the site to identify possible contamination from releases from former operational areas such as storage tanks located on the northern and southern portions of the site. The sampling activities from this investigation were described in a drafted trip report prepared by Tetra Tech and submitted to EPA on December 21, 2012. Tetra Tech and EPA are currently reviewing and evaluating the sample analytical results for this sampling event.

3.0 SITE ACTIVITIES

On Tuesday, January 24, 2012, Tetra Tech employee Kevin Scott traveled to the Riverside Avenue site and met with U.S. EPA On-Scene Coordinator Eric Daly and the foreman for the EPA's Emergency and Rapid Response Service (ERRS) contractor to discuss the approach for the removal assessment and determine the locations for the six proposed test trenches (test pits). Test pit excavation was performed by the ERRS contractor and test pit soil sample collection was performed by Tetra Tech. Test pits TP1, TP2, and TP3 were excavated and sampled on January 25, 2012. Test pit TP4 was excavated and sampled on January 26 and TP5 was partially excavated on January 26, but was not completed on this date because an 8 inch diameter water main was broken during the excavation of this test pit. Tetra Tech collected two of the three samples proposed for test pit TP5 on January 26. Test pit TP6 was excavated and sampled on January 27, 2012 as was the completion of the excavation and sampling of test pit TP5.

Figure 3, Test Pit Location Map, in Appendix A shows the locations of the six test pits excavated along the perimeter of the UST farm. Test pits were identified as TP1 through TP6. Two test pits were excavated on each of the north and south sides of the UST perimeter and one test pit was excavated on each of the east and west sides. Table 1 in Appendix B is a summary of the samples collected from the six test pits, including the date and time of each sample collected; the test pit number and sample depth; the analytical parameter and method, and laboratory, chain-of-custody record number and air bill number.

This section discusses sampling activities, sampling handling, equipment decontamination, and investigation-derived waste (IDW) and equipment decontamination procedures conducted as part of the January 2012 sampling event.

3.1 SAMPLING ACTIVITIES

Figure 4 in Appendix A shows the sampling locations and depths. Tetra Tech obtained geographic coordinates for each of the sampling locations using Google Earth. The coordinates

are included in sample summary Table 2 Appendix B. A photographic documentation log of the investigation is provided in Appendix C. Copies of the logbook notes are provided in Appendix D. Logbook notes were recorded in accordance with Tetra Tech SOP No. 024, “Recording of Notes in Field Logbook” (Tetra Tech 2008b). Copies of chain-of-custody records from the sampling event are provided in Appendix E.

This section describes the sampling activities and summarizes the sample collection methods, samples collected, and locations for the samples collected as part of this investigation.

3.2 SOIL SAMPLING

Tetra Tech collected a total of 20 soil samples (including two duplicate sample) from six test pits excavated by the EPA ERRS contractor around the perimeter of the UST farm as shown on Figure 3, Sampling Location Map, in Appendix A. Samples were collected at three depth intervals in each test pit - 4 feet below ground surface (bgs), 8 feet bgs, and 10 feet bgs. An ERRS laborer determined the depth of the excavation by dropping the end of a weighted tape measure into the excavation. When the desired depth interval was reached, the ERRS operator scooped dirt into the excavator bucket and then lifted it out of the excavation and positioned the bucket in a manner to facilitate sample collection by the START contractor. This procedure was repeated for each depth interval in each of the six test pits. Table 1 in Appendix B provides a summary of the surface soil samples collected from the Riverside Avenue site.

Soil samples were collected in accordance with Tetra Tech SOP No. 005, “Soil Sampling” (Tetra Tech 2009c). Tetra Tech collected soil directly into Encore samplers for VOC analysis. Additional sample volume was collected and homogenized, and then transferred with a dedicated plastic scoop into certified-clean bottleware for analyses for SVOCs, pesticides, aroclors, herbicides, metals, cyanide, and moisture. In four of the six test trenches, additional sample was also collected at the 8 foot depth for five soil samples, including one duplicate sample) for analysis for dioxins and furans. All soil samples were screened with a photoionization detector (PID) to evaluate the presence of VOCs. Table 3 in Appendix B provides a summary of the PID readings measured during the excavations of test pits TP1 through TP5. Due to inclement weather on January 27, 2012, the PID was not used during the excavation of test pit TP6.

3.3 SAMPLE HANDLING

Sample handling, packaging, and shipment procedures were performed in accordance with Tetra Tech SOP No. 019, “Packaging and Shipping Samples” (Tetra Tech 2008a). With the exception of 5 soil samples that were shipped to Lancaster Laboratories, a Tetra Tech subcontracted laboratory, all samples were shipped to EPA-approved CLP laboratories. All sampling data, including sampling times, dates, locations, types, and sampler, were recorded on Scribe chain-of-

custody/traffic reports and in the site logbook; copies are provided in Appendix D and Appendix E, respectively.

3.4 IDW AND EQUIPMENT DECONTAMINATION

Dedicated sampling equipment and personal protective equipment (PPE) were double-bagged and disposed of with other waste produced at the site. All investigation-derived waste (IDW) was double-bagged and disposed of as dry, industrial waste.

4.0 OBSERVATIONS

Dark, oil-stained fill material was encountered at all test pit locations and a strong petroleum odor was detected during the excavation of each test pit. A visible oily sheen was observed on the surface of pooled groundwater that accumulated in the bottom of each excavation. The water table was measured at a depth of approximately 6 feet bgs. A clay layer was determined to be present at approximately 11' bgs. All soil samples collected from the site did have notable visible contamination and notable petroleum odors. A pesticide odor was detected during the excavation of Test pit TP5.

Elevated PID readings were recorded in the test pits. The maximum PID reading in test pits TP1 through TP5 were 146 ppm, 190.5 ppm, 192.5ppm, 153.5 ppm and 200.7, respectively.

5.0 ANALYTICAL RESULTS

Samples were submitted to two EPA CLP laboratories, ALS Laboratory and A4 Scientific for inorganic analyte and organic compound analysis, respectively and to a Tetra Tech subcontracted laboratory, Lancaster Laboratories, for dioxins/furans analysis. Soil samples submitted to A4 Scientific were analyzed for EPA Target Compound List (TCL) VOCs, SVOCs, pesticides, herbicides and PCBs (aroclors) in accordance with the EPA CLP Statement of Work (SOW) for Organics Analysis, Multi-Media, Multi-Concentration (SOM01.2). Samples submitted to ALS Laboratory were analyzed for EPA Target Analyte List (TAL) metals including cyanide and mercury in accordance with the EPA CLP SOW for Inorganic Superfund Methods, Multi-Media, Multi-Concentration (ISM01.2) (EPA 2010). Soil samples shipped to Lancaster Laboratories for dioxins/furans analysis were analyzed using EPA method SW846-8290A. The CLP sample summaries from the sample analysis are provided in Attachment A. The CLP electronic deliverable documents are provided in Attachment B. The Lancaster Laboratories dioxins/furans analysis report is provided in Attachment C.

The EPA Region 2 Division of Environmental Services and Assessment (DESA) validated the EPA CLP analytical data packages. Data were validated in accordance with the EPA CLP SOW for Organics Analysis, Multi-Media, Multi-Concentration (SOM01.2), April 2007; the EPA CLP SOW for Inorganic Superfund Methods, Multi-Media, Multi-Concentration (ISM01.2), January 2010; the EPA National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-08-01, June 2008; the EPA National Functional Guidelines for Inorganic Superfund Data Review, EPA 540-R-10-011, January 2010; and EPA Region 2 Data Validation SOPs for Organic Analysis of Low/Medium Concentration VOCs, SVOCs, Pesticides, and Aroclors, under SOW SOM01.2 (SOPs HW-33 [Revision 1], HW-35 [Revision 1], HW-36 [Revision 2], and HW-37 [Revision 1]), respectively, August 2007. The DESA data validation reports are provided in Attachment D.

Tetra Tech validated the Lancaster Laboratories dioxins/furans analytical data package. Data were validated in accordance with the EPA CLP National Functional Guidelines for chlorinated dibenzo-p-dioxins (CDD) and chlorinated dibenzofurans (CDF) data review, September 2005. The dioxins/furans data validation report is provided in Attachment E.

Sample results were summarized and subsequently compared to New Jersey Non Residential Direct Contact Soil Screening Criteria (NRDCSCC). The analytical data summary tables are summarized in Appendix B, Tables 4 through 10. As the analytical data summary tables indicate, some of the concentrations are qualified with a "J". "J" is a data validation qualifier that indicates that the analyte is present; however the concentration is estimated because laboratory quality control criteria were not met, or the concentration of the analyte was below the contract require quantitation limit (CRQL).

Table 4 in Appendix B summarizes the VOCs detected in the test pit soil samples. Twenty-eight different VOCs were detected in all, however, xylene was the only VOC detected at concentrations at or above the NRDCSCC. Xylene was detected in sample TP3-2 and TP6-1 at a concentration of 1000 mg/kg and 1600 mg/kg, respectively. The NRDCSCC for xylene is 1000 mg/kg. Figure 5 in Appendix A shows the locations of the two xylene contaminated samples. Xylene was detected in 14 of the 20 soil samples collected. Isopropylbenzene and methylcyclohexane were detected in all 20 samples ranging in concentrations from less than 1 mg/kg to 15,000 mg/kg for isopropylbenzene and 70,000 mg/kg for methylcyclohexane. Three other VOCs including cyclohexane, ethylbenzene and trichloroethene were detected in ten or more samples.

Table 5 in Appendix B summarizes the SVOCs detected in the test pit soil samples. Twenty-five different SVOCs were detected in all, however, no SVOC were detected at concentrations at or above the NRDCSCC. Three SVOCs, 2-methylnaphthalene phenanthrene, and pyrene, were

detected in multiple soil samples but detected at their highest concentrations in sample TP6-1 collected from test pit 6 at a depth of 4 feet bgs. These three compounds were detected at concentrations of 11 mg/kg, 6.5 mg/kg, and 2.9 mg/kg, respectively in sample TP6-1.

Tables 6 and 7 in Appendix B summarize the pesticides and herbicides detected in the test pit soil samples, respectively. Twenty different pesticides and one herbicide were detected in all; however, none were detected at concentrations at or above the NRDCSCC.

Table 8 in Appendix B summarizes the aroclors detected in the test pit soil samples. Of eight aroclors analyzed for, only three different aroclors (1016, 1054, and 1060) were detected. No aroclors were detected at concentrations at or above the NRDCSCC. Aroclor 1054 was detected in trace amounts in eight of the 20 samples and aroclors 1016 and 1060 were detected in only two samples.

Table 9 in Appendix B summarizes the dioxins and furan detected in the five test pit soil samples submitted to Lancaster Laboratories. Several dioxin and furan compounds were detected in each of the five samples however; all were detected in the laboratory method blank and qualified as such.

Table 10 in Appendix B summarizes the inorganic analytes detected in test pit soil samples submitted to ALS Laboratory. Lead was the only metal detected at concentrations at or above the NRDCSCC. Lead was detected in sample TP3-1 and TP5-1 at a concentration of 1880 mg/kg and 900 mg/kg, respectively. The NRDCSCC for xylene is 600 mg/kg. Figure 6 in Appendix A shows the locations of the two lead contaminated samples. Lead was detected in all 20 of the soil samples collected.

6.0 CONCLUSIONS AND RECOMMENDATIONS

All soil samples collected from the site had notable visible contamination and notable petroleum odors. Elevated PID readings were recorded in the each of the test pits monitored with the PID. A pesticide odor was detected during the excavation of test pit TP5. Analytical results of 20 soil samples collected from six test pits reveal the presence of hazardous substances in subsurface soil at concentrations above the NJ NRDCSCC. The contamination includes xylene and lead. Xylene was detected in samples collected from two different test pits, at depths of 4 feet and 8 feet bgs. Lead was also detected in two different test pits, but only at a depth of 4 feet bgs. Concentrations of contaminants at above NJ NRDCSS were detected in three of the six test pits, TP3, TP5, and TP6. Tetra Tech recommends removing the 10 USTs, or as many of the USTs that still remain, excavate all contaminated soil in the vicinity of the USTs to a depth of approximately 8 feet bgs, and conduct post excavation sampling for VOCs and metals.

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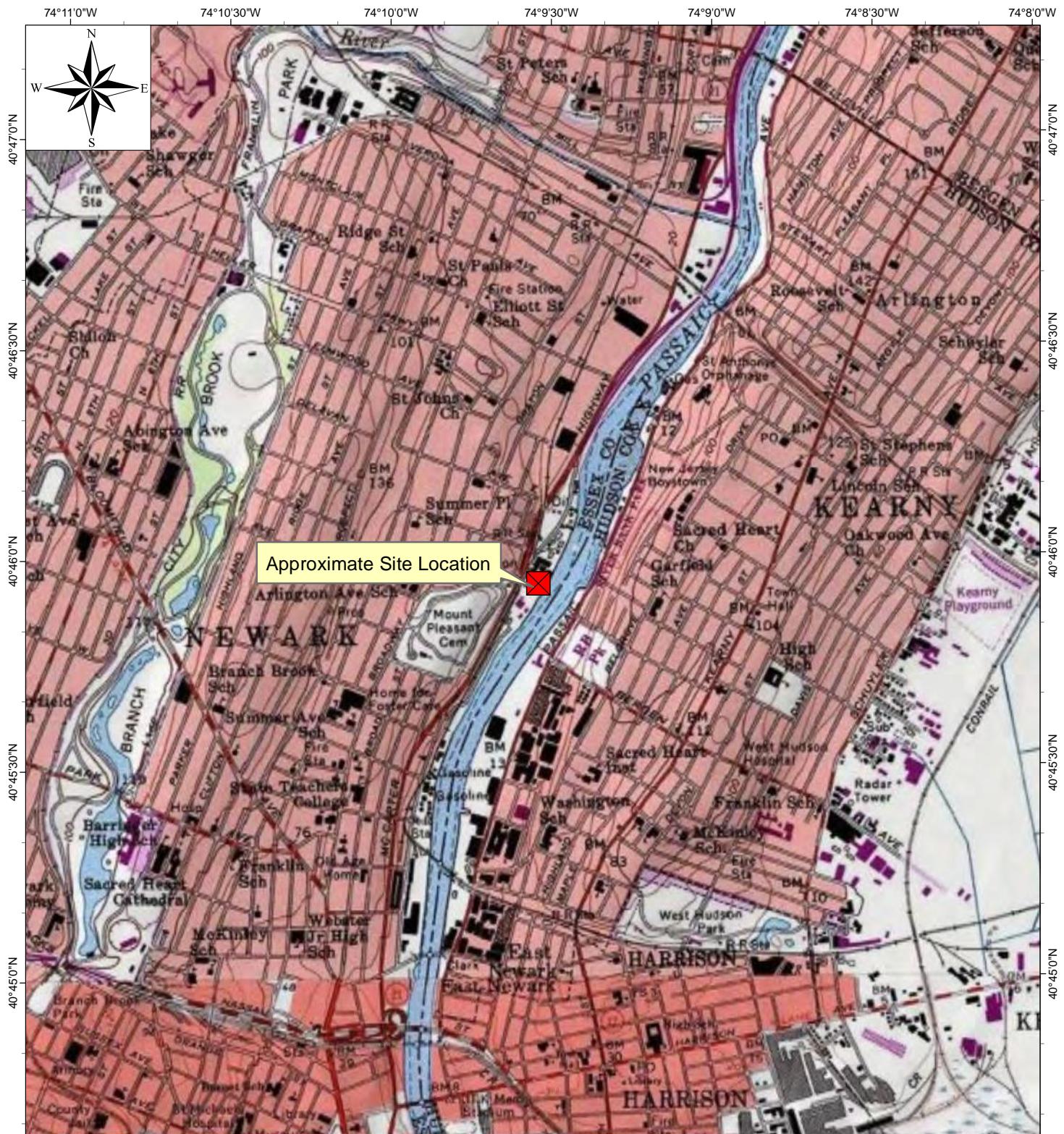
USGS. 1967. 7.5-Minute Series Topographic Map of Elizabeth, New Jersey, Quadrangle. Photorevised 1981.

Weston Solutions, Inc. (Weston). 2009. Preliminary Assessment Report. 1700-1712 and 1702 -1716 MC Carter Highway, Newark, New Jersey. May.

APPENDIX A

FIGURES

- 1 Site Location**
- 2 Site Layout Map**
- 3 Test Pit Location Map**
- 4 Test Pit Sample Location Map**
- 5 Xylene Concentrations Detected in Test Pit Soil Samples Above NJ Cleanup Criterion**
- 6 Lead Concentrations Detected in Test Pit Soil Samples Above NJ Cleanup Criterion**



Quadrangle Location = ■



Riverside Avenue
Newark, Essex County, New Jersey

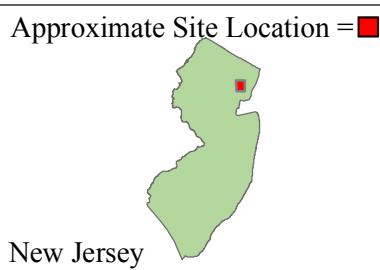
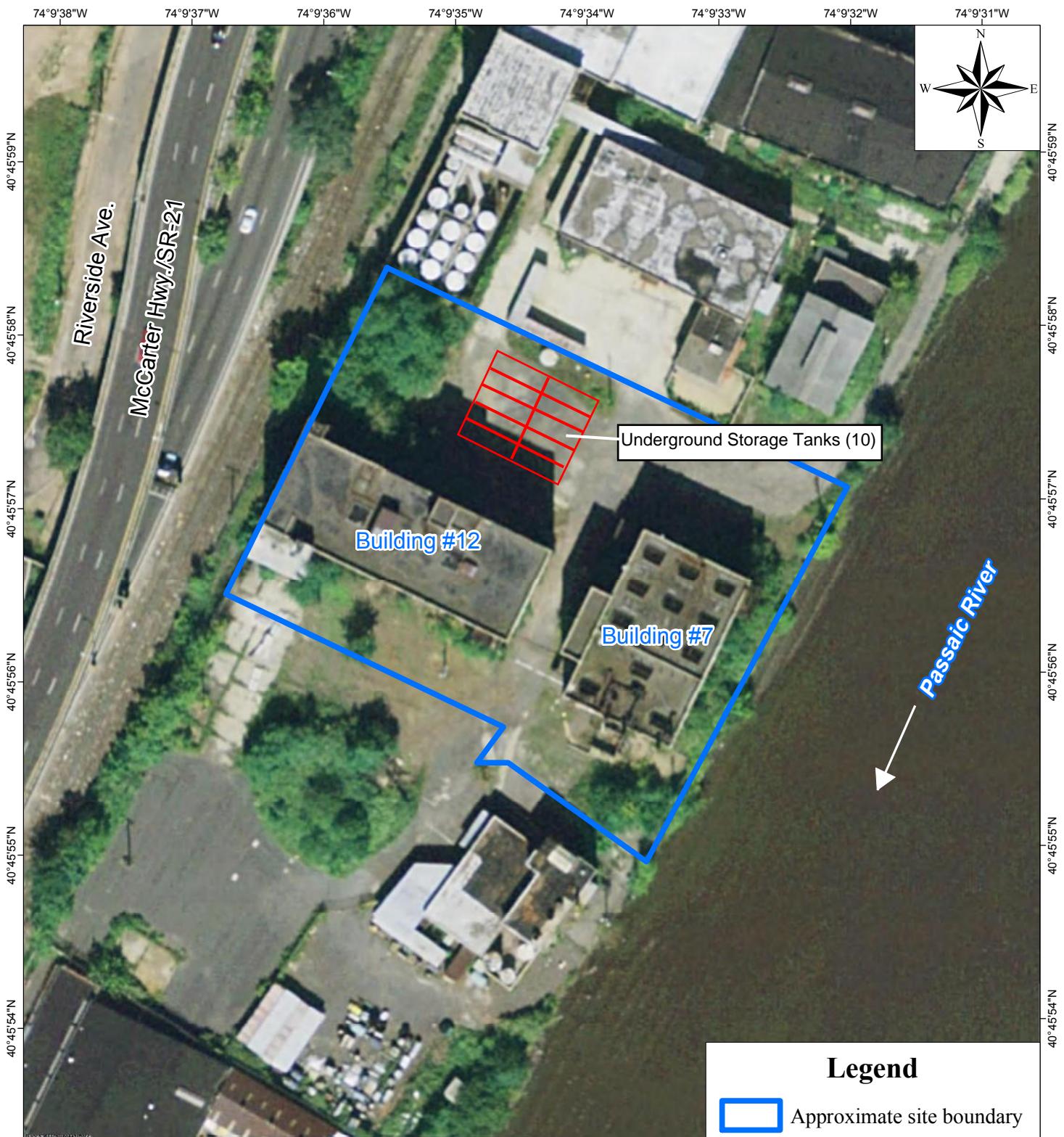
Figure 1
Site Location Map

New Jersey

Project number 9004L9004L100178000
EPA Contract No. EP-S7-06-01



TETRATECH



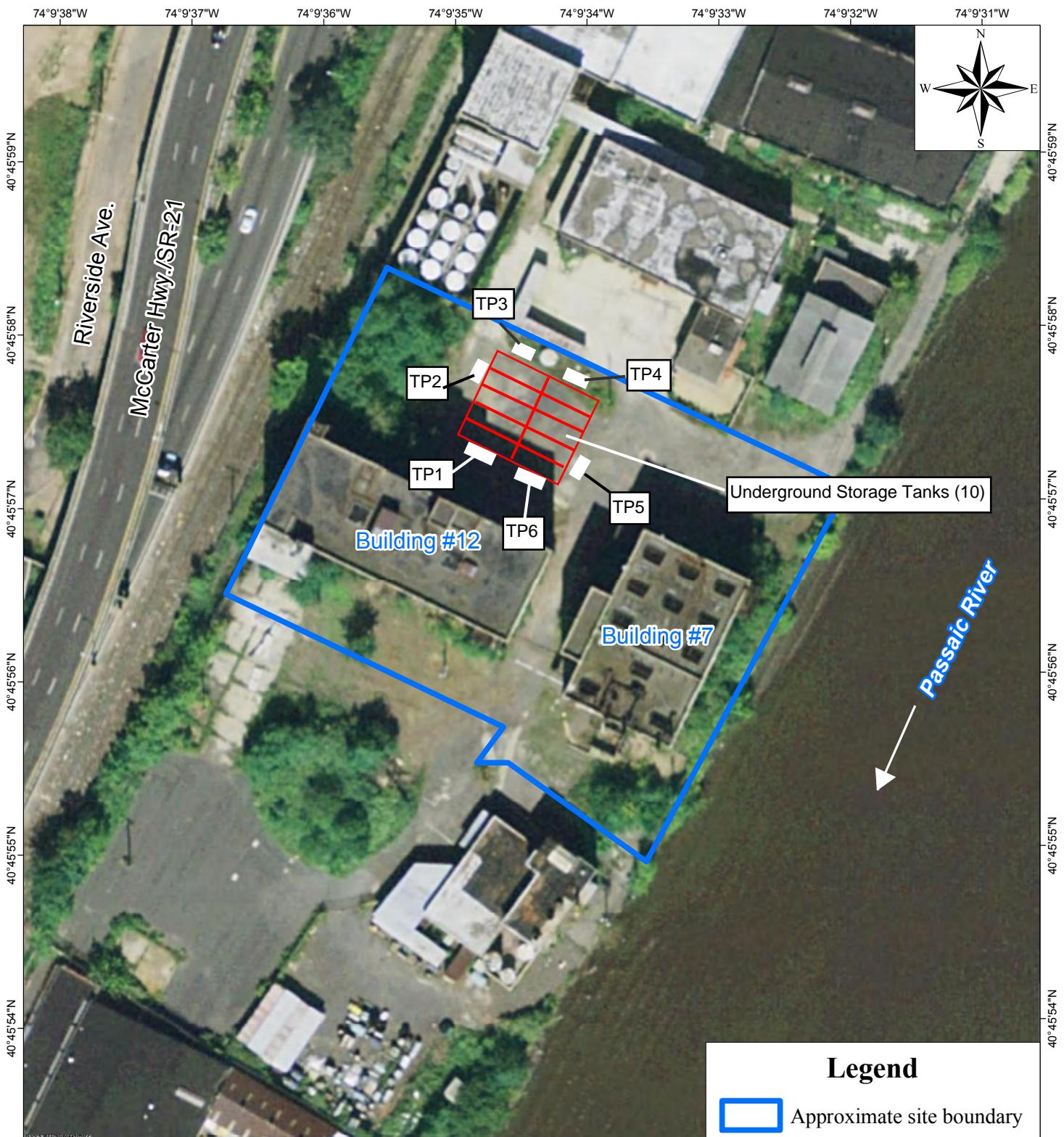
29 Riverside Avenue
Newark, Essex County, New Jersey

Figure 2
Site Layout Map

Project number 9004L100178
EPA Contract No. EP-S7-06-01

Map created on June 25, 2010
by D. Call, Tetra Tech EM Inc.





Legend

Approximate site boundary

Source: Modified from DigitalGlobe aerial photography, September 19, 2009.

0 50 100
Feet

Approximate Site Location =



29 Riverside Avenue
Newark, Essex County, New Jersey

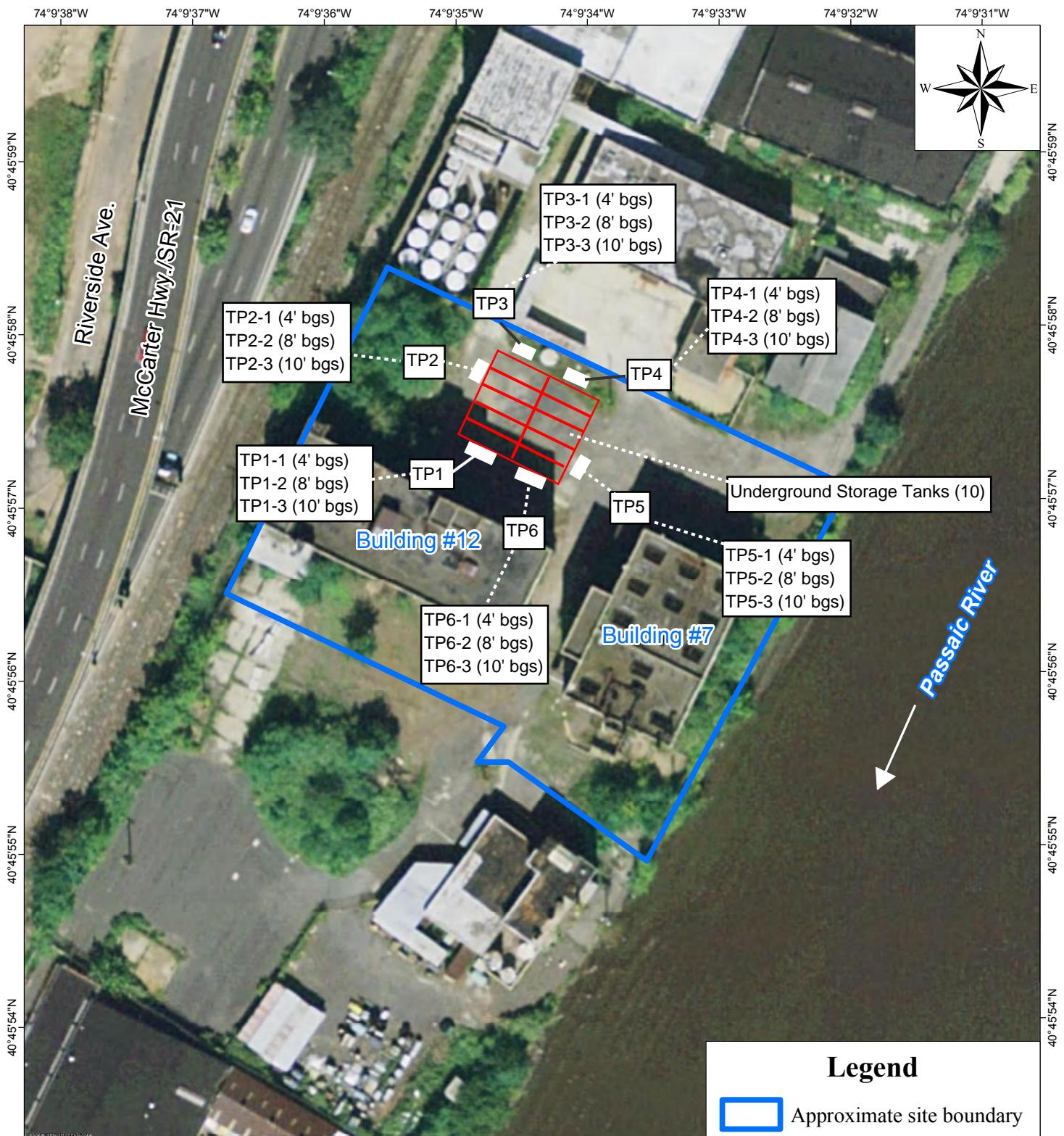
Figure 3
Test Pit Location Map

New Jersey

Project number 9004L100178
EPA Contract No. EP-S7-06-01

Map created on Feb 1, 2012
by k. scott, Tetra Tech EM Inc.

TETRA TECH



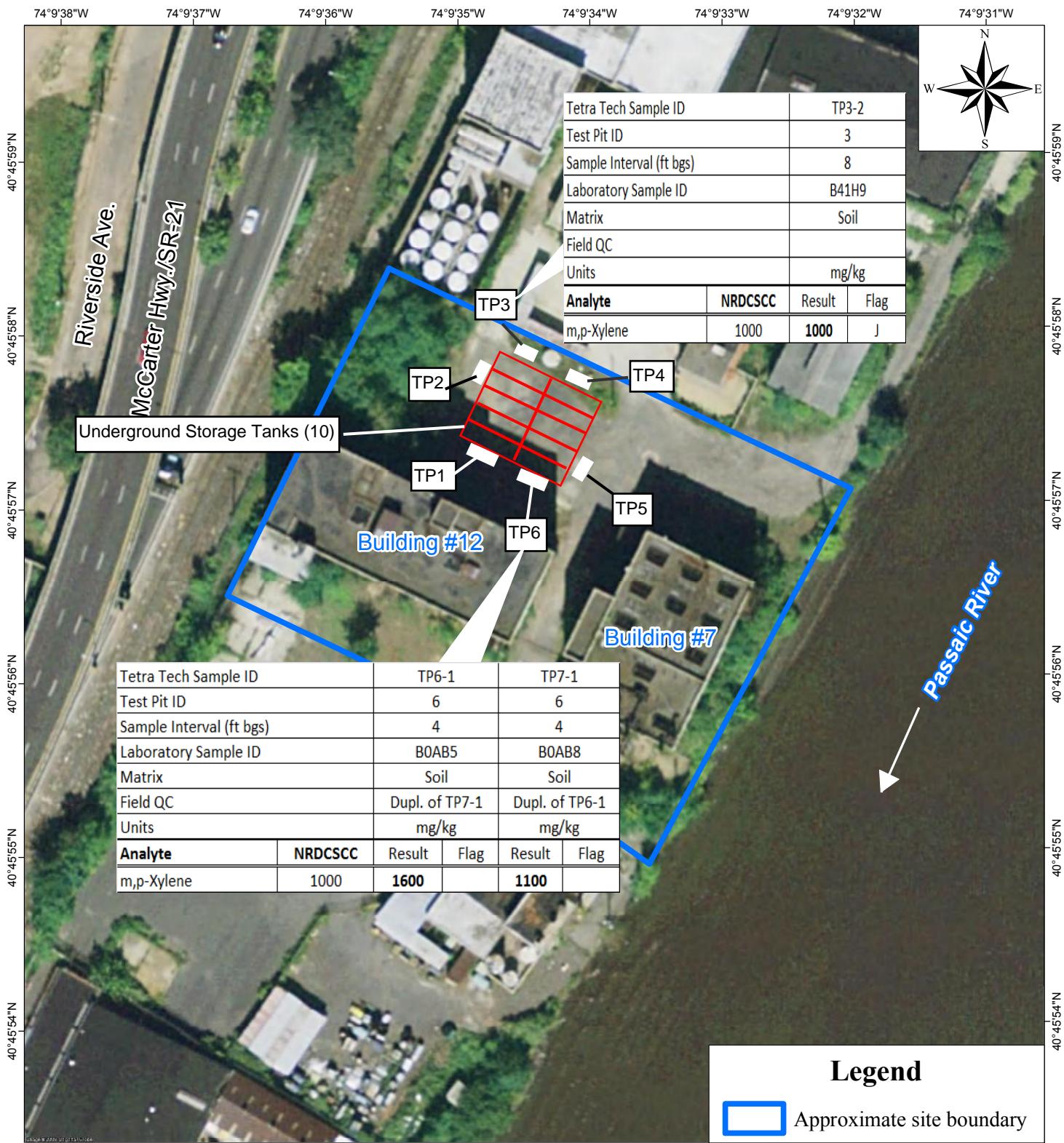
29 Riverside Avenue
Newark, Essex County, New Jersey

Figure 4
Test Pit Sample Location Map

Project number 9004L100178
EPA Contract No. EP-S7-06-01

Map created on Feb 1, 2012
by k. scott, Tetra Tech EM Inc.

TETRA TECH



Legend

Approximate site boundary

Source: Modified from DigitalGlobe aerial photography, September 19, 2009.

mg/kg - milligram per kilogram

NRDCSCC - Non-residential Direct Contact Soil Cleanup Criteria

0 50 100
 Feet



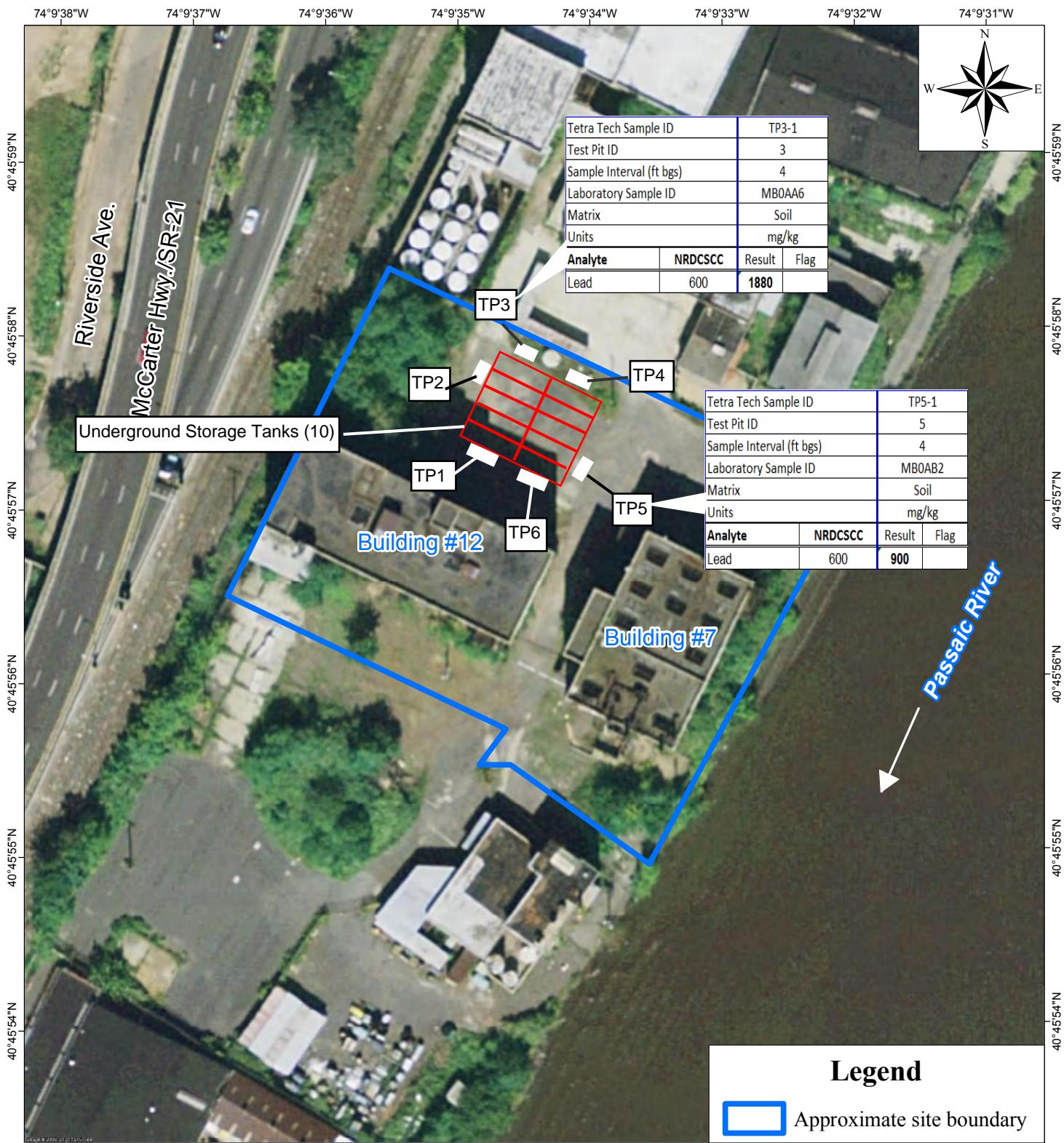
Riverside Avenue Site
Newark, Essex County, New Jersey

Figure 5
Xylene Concentrations Detected in Test Pit Soil Samples Above NJ Cleanup Criterion

Project number 9004L100178
EPA Contract No. EP-S7-06-01

Map created on March 16, 2012
by K. Scott, Tetra Tech EM Inc.

TETRA TECH



Source: Modified from DigitalGlobe aerial photography, September 19, 2009.

mg/kg - milligram per kilogram

NRDCSCC - Non-residential Direct Contact Soil Cleanup Criteria

0 50 100
Feet



Riverside Avenue Site
Newark, Essex County, New Jersey

Figure 6
Lead Concentrations Detected in Test Pit Soil Samples Above NJ Cleanup Criterion

Project number 9004L100178
EPA Contract No. EP-S7-06-01

Map created on March 16, 2012
by K. Scott, Tetra Tech EM Inc.



APPENDIX B

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TABLE 1
Riverside Avenue Site
Test Pit Sampling Summary

| Tetra Tech Sample ID | CLP Sample ID | Orientation to UST perimeter | Sample Depth (ft bgs) | Sample Date | Sample Time | Matrix | Analysis | Method | Container Type, Volume, (# of Containers) | Preservative | Field QC | Lab QC | Laboratory | CLP Lab Y/N | Date shipped | FedEx Airbill # | COC/TR # | Sample # on TR/COC |
|----------------------|---------------|------------------------------|-----------------------|-------------|-------------|--------|----------------|-----------------|---|--------------|----------|--------|------------------------|-------------|--------------|-----------------|----------------------|--------------------|
| TP1-1 | B41H2 | SW | 4 | 1/25/2012 | 1100 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) | 4° C | -- | -- | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0001 |
| | B0AA0 | | | | | | Moisture | | 2 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| | MBOAA0 | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8602 | | |
| | B41H3 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | | 02PC-0001 |
| | B0AA1 | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | ALS Laboratory | Y | 1/27/2012 | 8645 2662 8576 | | |
| | MBOAA1 | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | | |
| TP1-2 | B41H3 | SW | 8 | 1/25/2012 | 1120 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) | 4° C | -- | -- | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0002 |
| | B0AA1 | | | | | | Moisture | | 2 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| | MBOAA1 | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | ALS Laboratory | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0002 |
| | B41H4 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | | |
| | B0AA2 | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0003 |
| | MBOAA2 | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| TP1-3 | B41H4 | SW | 10 | 1/25/2012 | 1145 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) | 4° C | -- | -- | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0003 |
| | B0AA2 | | | | | | Moisture | | 2 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| | MBOAA2 | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | ALS Laboratory | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0003 |
| | B41H5 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | | |
| | B0AA3 | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0004 |
| | MBOAA3 | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| TP2-1 | B41H5 | W | 4 | 1/25/2012 | 1225 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) | 4° C | -- | -- | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0004 |
| | B0AA3 | | | | | | Moisture | | 2 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| | MBOAA3 | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | ALS Laboratory | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0004 |
| | B41H6 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | | |
| | B0AA4 | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0005 |
| | MBOAA4 | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| TP2-2 | NA | W | 8 | 1/25/2012 | 1245 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) | 4° C | -- | -- | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0005 |
| | B0AA4 | | | | | | Moisture | | 2 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| | MBOAA4 | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | ALS Laboratory | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0005 |
| | NA | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | | |
| | B41H7 | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | Lancaster Laboratories | N | 1/27/2012 | 8645 2662 8565 | 300804 | TP2-2 |
| | B0AA5 | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | | |
| | MBOAA5 | | | | | | Dioxins/Furans | SW846 8290A | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8565 | 300804 | TP2-2 |
| TP2-3 | B41H7 | W | 10 | 1/25/2012 | 1300 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) | 4° C | -- | -- | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0006 |
| | B0AA5 | | | | | | Moisture | | 2 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| | MBOAA5 | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | ALS Laboratory | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0006 |
| | B41H8 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | | |
| | B0AA6 | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0007 |
| | MBOAA6 | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| TP3-1 | B41H8 | NW | 4 | 1/25/2012 | 1500 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) | 4° C | -- | -- | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0007 |
| | B0AA6 | | | | | | Moisture | | 2 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| | MBOAA6 | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | ALS Laboratory | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0007 |
| | B41H8 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | | |
| | B0AA6 | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0007 |
| | MBOAA6 | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | | |
| | B41H8 | | | | | | TAL Inorganics | CLP SOW ISM01.3 | 8 oz. CWM glass jar (1) | | | | ALS Laboratory | Y | 1/27/2012 | 8645 2662 8576 | 2-012712-084509-0003 | 02PC-0007 |

TABLE 1
Riverside Avenue Site
Test Pit Sampling Summary

| Tetra Tech Sample ID | CLP Sample ID | Orientation to UST perimeter | Sampe Depth (ft bgs) | Sampe Date | Sample Time | Matrix | Analysis | Method | Container Type, Volume, (# of Containers) | Preservative | Field QC | Lab QC | Laboratory | CLP Lab Y/N | Date shipped | FedEx Airbill # | COC/TR # | Sample # on TR/COC | |
|----------------------|---------------|------------------------------|----------------------|------------|-------------|--------|----------------|-----------------|---|--------------|----------|--------|---------------|-------------|--------------|-----------------|----------------------|--------------------|--|
| TP3-2 | B41H9 | NW | 8 | 1/25/2012 | 1515 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) | 4° C | -- | -- | A4 Scientific | Y | 1/25/2012 | 8645 2662 8793 | 2-012512-172056-0001 | 02-p-0008 | |
| | BOAA7 | | | | | | Moisture | | 2 oz. CWM glass jar (1) | | | | | | | | | | |
| | MBOAA7 | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | 2-012612-132645-0001 | 02PC-0008 | |
| | NA | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | | |
| | B41H10 | NW | 10 | 1/25/2012 | 1530 | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | 2-012712-085202-0004 | 02PC-0009 | |
| | BOAA8 | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | | |
| | MBOAA8 | | | | | | TAL Inorganics | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | 2-012712-085202-0004 | | |
| | BA0AA9 | NE | 4 | 1/26/2012 | 915 | | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) | | | | | | 1/26/2012 | 8645 2662 8510 | 2-012712-084509-0003 | 02PC-0010 | |
| | MBOAA9 | | | | | | Moisture | | 2 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8602 | | | |
| | BOABO | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | 2-012712-085202-0004 | | |
| | MBOABO | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | | | | | |
| TP4-1 | BOAB1 | NE | 10 | 1/26/2012 | 945 | Soil | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | | | 1/26/2012 | 8645 2662 8510 | 2-012712-084509-0003 | 02PC-0011 | |
| | MBOAB1 | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8602 | | | |
| | BOAB2 | E | 4 | 1/26/2012 | 1020 | | TAL Inorganics | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | 2-012712-085202-0004 | | |
| | MBOAB2 | | | | | | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) | | | | | | 1/26/2012 | 8645 2662 8510 | 2-012712-084509-0003 | 02PC-0012 | |
| | BOAB3 | E | 8 | 1/26/2012 | 1030 | | Moisture | | 2 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8602 | | | |
| | MBOAB3 | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | 2-012712-085202-0004 | | |
| | NA | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0014 | |
| | BOAB3 | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8602 | | | |
| | MBOAB3 | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8576 | 2-012712-085202-0004 | | |
| | NA | | | | | | TAL Inorganics | | 8 oz. CWM glass jar (1) | | | | | | 1/27/2012 | 8645 2662 8565 | 300804 | TP5-2 | |

TABLE 1
Riverside Avenue Site
Test Pit Sampling Summary

| Tetra Tech Sample ID | CLP Sample ID | Orientation to UST perimeter | Sampe Depth (ft bgs) | Sampe Date | Sample Time | Matrix | Analysis | Method | Container Type, Volume, (# of Containers) | Preservative | Field QC | Lab QC | Laboratory | CLP Lab Y/N | Date shipped | FedEx Airbill # | COC/TR # | Sample # on TR/COC | | | | | |
|----------------------|---------------|------------------------------|----------------------|------------|-------------|--------|----------------|-----------------|--|--------------|-------------------------|--------|---------------|------------------------|--------------|-----------------|----------------------|--------------------|--|--|--|--|--|
| TP5-3 | B0AB4 | E | 10 | 1/27/2012 | 1015 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) 2 oz. CWM glass jar (1) | 4° C | -- | -- | A4 Scientific | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0015 | | | | | |
| | | | | | | | Moisture | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | MBOAB4 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | Herbicides | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TAL Inorganics | CLP SOW ISM01.3 | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| TP6-1 | B0ABS | SE | 4 | 1/27/2012 | 1050 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (4) 2 oz. CWM glass jar (1) | 4° C | field duplicate (TP7-1) | MS/MSD | A4 Scientific | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0016 | | | | | |
| | | | | | | | Moisture | | 8 oz. CWM glass jar (2) | | | | | | | | | | | | | | |
| | | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (2) | | | | | | | | | | | | | | |
| | MBOAB5 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (2) | | | | | | | | | | | | | | |
| | | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (2) | | | | | | | | | | | | | | |
| | | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (2) | | | | | | | | | | | | | | |
| | | | | | | | TAL Inorganics | CLP SOW ISM01.3 | 8 oz. CWM glass jar (2) | | | | | | | | | | | | | | |
| TP6-2 | B0AB6 | SE | 8 | 1/27/2012 | 1145 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) 2 oz. CWM glass jar (1) | 4° C | field duplicate (TP7-2) | -- | A4 Scientific | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0017 | | | | | |
| | | | | | | | Moisture | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | MBOAB6 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TAL Inorganics | CLP SOW ISM01.3 | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| TP6-3 | B0AB7 | SE | 10 | 1/27/2012 | 1215 | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) 2 oz. CWM glass jar (1) | 4° C | -- | -- | A4 Scientific | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0018 | | | | | |
| | | | | | | | Moisture | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | MBOAB7 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TAL Inorganics | CLP SOW ISM01.3 | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| TP7-1 | B0AB8 | SE | 4 | 1/27/2012 | 1245 (1050) | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) 2 oz. CWM glass jar (1) | 4° C | field duplicate (TP6-1) | -- | A4 Scientific | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0019 | | | | | |
| | | | | | | | Moisture | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | MBOAB8 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TAL Inorganics | CLP SOW ISM01.3 | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| TP7-2 | B0AB9 | SE | 8 | 1/27/2012 | 1300 (1245) | Soil | TCL VOCs | CLP SOW SOM01.2 | Encore® Sampler, 5 gram (3) 2 oz. CWM glass jar (1) | 4° C | field duplicate (TP6-2) | -- | A4 Scientific | Y | 1/27/2012 | 8645 2662 8602 | 2-012712-084509-0003 | 02PC-0020 | | | | | |
| | | | | | | | Moisture | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TCL SVOCs | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | MBOAB9 | | | | | | TCL Pesticides | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TCL Aroclors | | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | Herbicides | SW846 8151A | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | | | | | | | TAL Inorganics | CLP SOW ISM01.3 | 8 oz. CWM glass jar (1) | | | | | | | | | | | | | | |
| | NA | | | | | | Dioxins/Furans | SW846 8290A | 8 oz. CWM glass jar (2) | | | | MS/MSD | Lancaster Laboratories | N | 1/27/2012 | 8645 2662 8565 | 300804 | | | | | |

Table 2
Geographic Coordinates of Test Pits
Riverside Avenue Site
Newark, NJ

| Test Pit ID | Longitude | Latitude |
|--------------------|------------------|-----------------|
| TP1 | 40° 45' 57.26" N | 74° 09' 35.16 W |
| TP2 | 40° 45' 57.58" N | 74° 09' 35.08 W |
| TP3 | 40° 45' 57.70" N | 74° 09' 34.86 W |
| TP4 | 40° 45' 57.55" N | 74° 09' 34.39 W |
| TP5 | 40° 45' 57.10" N | 74° 09' 34.51 W |
| TP6 | 40° 45' 57.07" N | 74° 09' 34.81 W |

TABLE 3
Summary of PID Readings From Test Pit Excavations
Riverside Avenue Site
Newark, NJ

Instrument: MiniRAE 2000 (PGM7600) Serial Number: 013459
Data Points: 295 Gas Name: Isobutylene Sample Period: 60 sec
Last Calibration Time: 01/20/2012 13:38

| Line# | Date | Time | Min(ppm) | | Avg(ppm) | | Max(ppm) | | TEST PIT # | |
|-------|-----------|-------|----------|------|----------|----|----------|----|-------------------|--|
| | | | 100 | | 100 | | 100 | | | |
| | | | 50 | 50 | 50 | 50 | 50 | 50 | | |
| 1 | 1/25/2012 | 10:58 | 0 | 6 | 42.5 | | | | TP1 | |
| 2 | 1/25/2012 | 10:59 | 0 | 4.5 | 29.3 | | | | TP1 | |
| 3 | 1/25/2012 | 11:00 | 0 | 6.2 | 34.6 | | | | TP1 | |
| 4 | 1/25/2012 | 11:01 | 0 | 17.7 | 115.8 H | | | | TP1 | |
| 5 | 1/25/2012 | 11:02 | 0 | 5.7 | 18.9 | | | | TP1 | |
| 6 | 1/25/2012 | 11:03 | 0 | 3.8 | 24.5 | | | | TP1 | |
| 7 | 1/25/2012 | 11:04 | 0 | 0 | 0 | | | | TP1 | |
| 8 | 1/25/2012 | 11:05 | 0 | 0.8 | 7.4 | | | | TP1 | |
| 9 | 1/25/2012 | 11:06 | 0 | 2 | 7.5 | | | | TP1 | |
| 10 | 1/25/2012 | 11:07 | 0 | 0 | 0.6 | | | | TP1 | |
| 11 | 1/25/2012 | 11:08 | 0 | 0.8 | 5.5 | | | | TP1 | |
| 12 | 1/25/2012 | 11:09 | 0 | 0 | 0 | | | | TP1 | |
| 13 | 1/25/2012 | 11:10 | 0 | 0 | 0 | | | | TP1 | |
| 14 | 1/25/2012 | 11:11 | 0 | 0.2 | 5.3 | | | | TP1 | |
| 15 | 1/25/2012 | 11:12 | 0.5 | 7.2 | 30.8 | | | | TP1 | |
| 16 | 1/25/2012 | 11:13 | 0.2 | 4.6 | 11.7 | | | | TP1 | |
| 17 | 1/25/2012 | 11:14 | 0 | 5.2 | 18.8 | | | | TP1 | |
| 18 | 1/25/2012 | 11:15 | 0.6 | 10.5 | 53.2 L | | | | TP1 | |
| 19 | 1/25/2012 | 11:16 | 0 | 1.7 | 10.1 | | | | TP1 | |
| 20 | 1/25/2012 | 11:17 | 0 | 0.2 | 7.3 | | | | TP1 | |
| 21 | 1/25/2012 | 11:18 | 0 | 7.8 | 25.2 | | | | TP1 | |
| 22 | 1/25/2012 | 11:19 | 0 | 1.7 | 4.9 | | | | TP1 | |
| 23 | 1/25/2012 | 11:20 | 0 | 0.6 | 9.1 | | | | TP1 | |
| 24 | 1/25/2012 | 11:21 | 0 | 11.7 | 59.9 L | | | | TP1 | |
| 25 | 1/25/2012 | 11:22 | 0 | 18.2 | 117.5 H | | | | TP1 | |
| 26 | 1/25/2012 | 11:23 | 0 | 0 | 0 | | | | TP1 | |
| 27 | 1/25/2012 | 11:24 | 0 | 10.2 | 146 H | | | | TP1 | |
| 28 | 1/25/2012 | 11:25 | 0.4 | 22.2 | 64.8 L | | | | TP1 | |
| 29 | 1/25/2012 | 11:26 | 0 | 10.6 | 47.1 | | | | TP1 | |
| 30 | 1/25/2012 | 11:27 | 0 | 3.4 | 22.6 | | | | TP1 | |
| 31 | 1/25/2012 | 11:28 | 0 | 4.5 | 15 | | | | TP1 | |
| 32 | 1/25/2012 | 11:29 | 0 | 0 | 0 | | | | TP1 | |
| 33 | 1/25/2012 | 11:30 | 0 | 0.3 | 6.1 | | | | TP1 | |
| 34 | 1/25/2012 | 11:31 | 0 | 0 | 0.8 | | | | TP1 | |
| 35 | 1/25/2012 | 11:32 | 0 | 2.6 | 10.5 | | | | TP1 | |
| 36 | 1/25/2012 | 11:33 | 0 | 0.2 | 2.5 | | | | TP1 | |
| 37 | 1/25/2012 | 11:34 | 0 | 0 | 1 | | | | TP1 | |
| 38 | 1/25/2012 | 11:35 | 0 | 0.3 | 3.4 | | | | TP1 | |
| 39 | 1/25/2012 | 11:36 | 0 | 0.7 | 5 | | | | TP1 | |
| 40 | 1/25/2012 | 11:37 | 0 | 0.4 | 4.6 | | | | TP1 | |
| 41 | 1/25/2012 | 11:38 | 0 | 1.5 | 21.2 | | | | TP1 | |
| 42 | 1/25/2012 | 11:39 | 0 | 0.1 | 2.1 | | | | TP1 | |
| 43 | 1/25/2012 | 11:40 | 0 | 3.7 | 19.4 | | | | TP1 | |
| 44 | 1/25/2012 | 11:41 | 0 | 0 | 1.5 | | | | TP1 | |
| 45 | 1/25/2012 | 11:42 | 0 | 0 | 0 | | | | TP1 | |
| 46 | 1/25/2012 | 11:43 | 0 | 0 | 0 | | | | TP1 | |
| 47 | 1/25/2012 | 11:44 | 0 | 0 | 0 | | | | TP1 | |
| 48 | 1/25/2012 | 11:45 | 0 | 7.9 | 48.5 | | | | TP1 | |
| 49 | 1/25/2012 | 11:46 | 0 | 1.5 | 15.3 | | | | TP1 | |
| 50 | 1/25/2012 | 11:47 | 0 | 0 | 0.3 | | | | TP1 | |
| 51 | 1/25/2012 | 11:48 | 0 | 0.8 | 7.2 | | | | TP1 | |
| 52 | 1/25/2012 | 11:49 | 0 | 0.8 | 6.7 | | | | TP1 | |
| 53 | 1/25/2012 | 11:50 | 0 | 1.5 | 6.6 | | | | TP1 | |
| 54 | 1/25/2012 | 11:51 | 0 | 3 | 12.5 | | | | TP1 | |

TABLE 3
Summary of PID Readings From Test Pit Excavations
Riverside Avenue Site
Newark, NJ

Instrument: MiniRAE 2000 (PGM7600) Serial Number: 013459
 Data Points: 295 Gas Name: Isobutylene Sample Period: 60 sec
 Last Calibration Time: 01/20/2012 13:38

| Measurement Type: | | Min(ppm) | Avg(ppm) | Max(ppm) | | | |
|----------------------------|-----------------|----------|----------|------------|------------|-------|------------|
| High Alarm Levels: | | 100 | 100 | 100 | | | |
| Low Alarm Levels: | | 50 | 50 | 50 | | | |
| Line# | Date Time | Min(ppm) | Alarm | Avg(ppm) | Max(ppm) | Alarm | TEST PIT # |
| 55 | 1/25/2012 11:52 | 0 | | 0 | 0 | | TP1 |
| 56 | 1/25/2012 11:53 | 0 | | 1.7 | 18.8 | | TP1 |
| 57 | 1/25/2012 11:54 | 0 | | 0 | 0 | | TP1 |
| 58 | 1/25/2012 11:55 | 0 | | 0.4 | 6 | | TP1 |
| 59 | 1/25/2012 11:56 | 1.3 | | 6.3 | 16.3 | | TP1 |
| 60 | 1/25/2012 11:57 | 1.2 | | 5.4 | 14.8 | | TP1 |
| 61 | 1/25/2012 11:58 | 0 | | 4.5 | 15.4 | | TP1 |
| 62 | 1/25/2012 11:59 | 0 | | 1.4 | 8.1 | | TP1 |
| 63 | 1/25/2012 12:00 | 0 | | 1.5 | 6.8 | | TP1 |
| 64 | 1/25/2012 12:01 | 0 | | 7.6 | 19.4 | | TP1 |
| 65 | 1/25/2012 12:02 | 0.4 | | 11.5 | 43.6 | | TP1 |
| 66 | 1/25/2012 12:03 | 0 | | 7.5 | 53 L | | TP1 |
| 67 | 1/25/2012 12:04 | 2.5 | | 19.7 | 138.8 H | | TP1 |
| 68 | 1/25/2012 12:05 | 3.4 | | 11.1 | 33.3 | | TP1 |
| 69 | 1/25/2012 12:06 | 0 | | 9.6 | 35.3 | | TP1 |
| 70 | 1/25/2012 12:07 | 0 | | 2.7 | 9 | | TP1 |
| 71 | 1/25/2012 12:08 | 0 | | 3.7 | 13.4 | | TP1 |
| 72 | 1/25/2012 12:09 | 0 | | 0.2 | 3 | | TP1 |
| 73 | 1/25/2012 12:10 | 0 | | 2.6 | 15.1 | | TP1 |
| 74 | 1/25/2012 12:11 | 0 | | 2.7 | 15.5 | | TP1 |
| 75 | 1/25/2012 12:12 | 0 | | 0.2 | 2.1 | | TP1 |
| 76 | 1/25/2012 12:13 | 0 | | 0 | 0.3 | | TP1 |
| 77 | 1/25/2012 12:14 | 0 | | 0 | 0 | | TP1 |
| 78 | 1/25/2012 12:15 | 0 | | 4 | 12.2 | | TP1 |
| AVERAGE READING TP1 | | | | 3.8 | | | |
| MAXIMUM READING TP1 | | | | | 146 | | |
| 79 | 1/25/2012 12:16 | 0 | | 1.2 | 10.4 | | TP2 |
| 80 | 1/25/2012 12:17 | 0 | | 0.5 | 9.5 | | TP2 |
| 81 | 1/25/2012 12:18 | 0 | | 0 | 0 | | TP2 |
| 82 | 1/25/2012 12:19 | 0 | | 0 | 0 | | TP2 |
| 83 | 1/25/2012 12:20 | 0 | | 18.9 | 130.3 H | | TP2 |
| 84 | 1/25/2012 12:21 | 0 | | 1.3 | 20 | | TP2 |
| 85 | 1/25/2012 12:22 | 0 | | 0.3 | 5.5 | | TP2 |
| 86 | 1/25/2012 12:23 | 0 | | 18.9 | 89.8 L | | TP2 |
| 87 | 1/25/2012 12:24 | 0 | | 0.1 | 2.8 | | TP2 |
| 88 | 1/25/2012 12:25 | 0 | | 0.2 | 2.8 | | TP2 |
| 89 | 1/25/2012 12:26 | 0 | | 0 | 1.6 | | TP2 |
| 90 | 1/25/2012 12:27 | 0 | | 1 | 10.2 | | TP2 |
| 91 | 1/25/2012 12:28 | 0 | | 0 | 0 | | TP2 |
| 92 | 1/25/2012 12:29 | 0 | | 0.2 | 5.7 | | TP2 |
| 93 | 1/25/2012 12:30 | 0 | | 0 | 2.2 | | TP2 |
| 94 | 1/25/2012 12:31 | 0 | | 0 | 0 | | TP2 |
| 95 | 1/25/2012 12:32 | 0 | | 0 | 0.3 | | TP2 |
| 96 | 1/25/2012 12:33 | 0 | | 0 | 0 | | TP2 |
| 97 | 1/25/2012 12:34 | 0 | | 0 | 0 | | TP2 |
| 98 | 1/25/2012 12:35 | 0 | | 0 | 0 | | TP2 |
| 99 | 1/25/2012 12:36 | 0 | | 0 | 0 | | TP2 |
| 100 | 1/25/2012 12:37 | 0 | | 0 | 0 | | TP2 |
| 101 | 1/25/2012 12:38 | 0 | | 0 | 0 | | TP2 |
| 102 | 1/25/2012 12:39 | 0 | | 0 | 0.8 | | TP2 |
| 103 | 1/25/2012 12:40 | 0 | | 2.1 | 29.6 | | TP2 |
| 104 | 1/25/2012 12:41 | 0 | | 39.4 | 190.5 H | | TP2 |
| 105 | 1/25/2012 12:42 | 0 | | 0.4 | 6 | | TP2 |
| 106 | 1/25/2012 12:43 | 0 | | 1.8 | 15.6 | | TP2 |

TABLE 3
Summary of PID Readings From Test Pit Excavations
Riverside Avenue Site
Newark, NJ

Instrument: MiniRAE 2000 (PGM7600) Serial Number: 013459
Data Points: 295 Gas Name: Isobutylene Sample Period: 60 sec
Last Calibration Time: 01/20/2012 13:38

| Measurement Type: | | Min(ppm) | Avg(ppm) | Max(ppm) | | | | |
|----------------------------|-----------|----------|----------|------------|----------|--------------|-------|-------------------|
| High Alarm Levels: | | 100 | 100 | 100 | | | | |
| Low Alarm Levels: | | 50 | 50 | 50 | | | | |
| Line# | Date | Time | Min(ppm) | Alarm | Avg(ppm) | Max(ppm) | Alarm | TEST PIT # |
| 107 | 1/25/2012 | 12:44 | 0 | | 0 | 2.2 | | TP2 |
| 108 | 1/25/2012 | 12:45 | 0 | | 0.6 | 6.6 | | TP2 |
| 109 | 1/25/2012 | 12:46 | 0 | | 0.1 | 3.7 | | TP2 |
| 110 | 1/25/2012 | 12:47 | 0 | | 0.1 | 4.7 | | TP2 |
| 111 | 1/25/2012 | 12:48 | 0 | | 0 | 0 | | TP2 |
| 112 | 1/25/2012 | 12:49 | 0 | | 0 | 0 | | TP2 |
| 113 | 1/25/2012 | 12:50 | 0 | | 0 | 0 | | TP2 |
| 114 | 1/25/2012 | 12:51 | 0 | | 0 | 0 | | TP2 |
| 115 | 1/25/2012 | 12:52 | 0 | | 0 | 0 | | TP2 |
| 116 | 1/25/2012 | 12:53 | 0 | | 46.7 | 172.7 H | | TP2 |
| 117 | 1/25/2012 | 12:54 | 0.2 | | 2.9 | 10.1 | | TP2 |
| 118 | 1/25/2012 | 12:55 | 0 | | 1.7 | 7.5 | | TP2 |
| 119 | 1/25/2012 | 12:56 | 0 | | 4.1 | 24.2 | | TP2 |
| 120 | 1/25/2012 | 12:57 | 1.1 | | 11.5 | 23.2 | | TP2 |
| 121 | 1/25/2012 | 12:58 | 0 | | 3.7 | 16.8 | | TP2 |
| 122 | 1/25/2012 | 12:59 | 0 | | 0 | 0 | | TP2 |
| 123 | 1/25/2012 | 13:00 | 0 | | 0 | 0 | | TP2 |
| 124 | 1/25/2012 | 13:01 | 0 | | 0 | 0 | | TP2 |
| 125 | 1/25/2012 | 13:02 | 0 | | 0 | 0 | | TP2 |
| 126 | 1/25/2012 | 13:03 | 0 | | 0.1 | 2.8 | | TP2 |
| 127 | 1/25/2012 | 13:04 | 0 | | 0.1 | 4.3 | | TP2 |
| 128 | 1/25/2012 | 13:05 | 0 | | 0.8 | 8.7 | | TP2 |
| 129 | 1/25/2012 | 13:06 | 0 | | 0 | 2.6 | | TP2 |
| 130 | 1/25/2012 | 13:07 | 0 | | 0 | 1.6 | | TP2 |
| 131 | 1/25/2012 | 13:08 | 0 | | 0 | 0.4 | | TP2 |
| 132 | 1/25/2012 | 13:09 | 0 | | 0 | 0 | | TP2 |
| 133 | 1/25/2012 | 13:10 | 0 | | 0 | 0 | | TP2 |
| 134 | 1/25/2012 | 13:11 | 0 | | 0 | 0 | | TP2 |
| 135 | 1/25/2012 | 13:12 | 0 | | 0 | 0.2 | | TP2 |
| 136 | 1/25/2012 | 13:13 | 0 | | 0 | 0.3 | | TP2 |
| 137 | 1/25/2012 | 13:14 | 0 | | 3.2 | 17.1 | | TP2 |
| AVERAGE READING TP2 | | | | 3.3 | | | | |
| MAXIMUM READING TP2 | | | | | | 190.5 | | |
| 1 | 1/25/2012 | 14:48 | 0 | | 0 | 0 | | TP3 |
| 2 | 1/25/2012 | 14:49 | 0 | | 0 | 0 | | TP3 |
| 3 | 1/25/2012 | 14:50 | 0 | | 0 | 0 | | TP3 |
| 4 | 1/25/2012 | 14:51 | 0 | | 0 | 0 | | TP3 |
| 5 | 1/25/2012 | 14:52 | 0 | | 0 | 0 | | TP3 |
| 6 | 1/25/2012 | 14:53 | 0 | | 0 | 0 | | TP3 |
| 7 | 1/25/2012 | 14:54 | 0 | | 0 | 0 | | TP3 |
| 8 | 1/25/2012 | 14:55 | 0 | | 0 | 0 | | TP3 |
| 9 | 1/25/2012 | 14:56 | 0 | | 0 | 0 | | TP3 |
| 10 | 1/25/2012 | 14:57 | 0 | | 0.7 | 10 | | TP3 |
| 11 | 1/25/2012 | 14:58 | 0 | | 0 | 0 | | TP3 |
| 12 | 1/25/2012 | 14:59 | 0 | | 11.3 | 115.5 H | | TP3 |
| 13 | 1/25/2012 | 15:00 | 1 | | 27.5 | 159.5 H | | TP3 |
| 14 | 1/25/2012 | 15:01 | 0 | | 0.3 | 10.7 | | TP3 |
| 15 | 1/25/2012 | 15:02 | 0 | | 4 | 27.9 | | TP3 |
| 16 | 1/25/2012 | 15:03 | 0 | | 8 | 25.5 | | TP3 |
| 17 | 1/25/2012 | 15:04 | 0 | | 7.3 | 16.2 | | TP3 |
| 18 | 1/25/2012 | 15:05 | 0 | | 2.4 | 12.8 | | TP3 |
| 19 | 1/25/2012 | 15:06 | 0 | | 0.4 | 7.8 | | TP3 |
| 20 | 1/25/2012 | 15:07 | 0 | | 0.2 | 3.6 | | TP3 |
| 21 | 1/25/2012 | 15:08 | 0 | | 0.3 | 2.2 | | TP3 |

TABLE 3
 Summary of PID Readings From Test Pit Excavations
 Riverside Avenue Site
 Newark, NJ

Instrument: MiniRAE 2000 (PGM7600) Serial Number: 013459
 Data Points: 295 Gas Name: Isobutylene Sample Period: 60 sec
 Last Calibration Time: 01/20/2012 13:38

| Measurement Type: | | Min(ppm) | Avg(ppm) | Max(ppm) | | | |
|----------------------------|-----------------|----------|------------|--------------|----------|-------|------------|
| High Alarm Levels: | | 100 | 100 | 100 | | | |
| Low Alarm Levels: | | 50 | 50 | 50 | | | |
| Line# | Date Time | Min(ppm) | Alarm | Avg(ppm) | Max(ppm) | Alarm | TEST PIT # |
| 22 | 1/25/2012 15:09 | 0 | | 19.7 | 165.8 | H | TP3 |
| 23 | 1/25/2012 15:10 | 0 | | 17.7 | 167.1 | H | TP3 |
| 24 | 1/25/2012 15:11 | 0 | | 0 | 0 | | TP3 |
| 25 | 1/25/2012 15:12 | 0 | | 15.3 | 177.6 | H | TP3 |
| 26 | 1/25/2012 15:13 | 0 | | 54.7 | 192.5 | H | TP3 |
| 27 | 1/25/2012 15:14 | 0 | | 0.2 | 4.5 | | TP3 |
| 28 | 1/25/2012 15:15 | 0 | | 0 | 1.9 | | TP3 |
| 29 | 1/25/2012 15:16 | 0 | | 0 | 0 | | TP3 |
| 30 | 1/25/2012 15:17 | 0 | | 0.1 | 2.7 | | TP3 |
| 31 | 1/25/2012 15:18 | 0 | | 0 | 0 | | TP3 |
| 32 | 1/25/2012 15:19 | 0 | | 0 | 0 | | TP3 |
| 33 | 1/25/2012 15:20 | 0 | | 0 | 0.9 | | TP3 |
| 34 | 1/25/2012 15:21 | 0 | | 0.1 | 2.4 | | TP3 |
| 35 | 1/25/2012 15:22 | 0 | | 2 | 10.8 | | TP3 |
| 36 | 1/25/2012 15:23 | 0 | | 0.2 | 6.9 | | TP3 |
| 37 | 1/25/2012 15:24 | 0 | | 10.2 | 42.9 | | TP3 |
| 38 | 1/25/2012 15:25 | 0 | | 3.6 | 42.1 | | TP3 |
| 39 | 1/25/2012 15:26 | 0 | | 0 | 0 | | TP3 |
| 40 | 1/25/2012 15:27 | 0 | | 0 | 0 | | TP3 |
| 41 | 1/25/2012 15:28 | 0 | | 0 | 0.9 | | TP3 |
| 42 | 1/25/2012 15:29 | 0 | | 0 | 0 | | TP3 |
| 43 | 1/25/2012 15:30 | 0 | | 0 | 0 | | TP3 |
| 44 | 1/25/2012 15:31 | 0 | | 0 | 0 | | TP3 |
| 45 | 1/25/2012 15:32 | 0 | | 0.9 | 13.9 | | TP3 |
| 46 | 1/25/2012 15:33 | 0 | | 4.1 | 13.7 | | TP3 |
| 47 | 1/25/2012 15:34 | 0 | | 0 | 0 | | TP3 |
| 48 | 1/25/2012 15:35 | 0 | | 0 | 0 | | TP3 |
| 49 | 1/25/2012 15:36 | 0 | | 0.2 | 1.6 | | TP3 |
| 50 | 1/25/2012 15:37 | 0 | | 0.8 | 4.4 | | TP3 |
| 51 | 1/25/2012 15:38 | 0 | | 0.7 | 6 | | TP3 |
| 52 | 1/25/2012 15:39 | 0 | | 0 | 0 | | TP3 |
| 53 | 1/25/2012 15:40 | 0 | | 0 | 0 | | TP3 |
| 54 | 1/25/2012 15:41 | 0 | | 0 | 0 | | TP3 |
| 55 | 1/25/2012 15:42 | 0 | | 0 | 0 | | TP3 |
| 56 | 1/25/2012 15:43 | 0 | | 0 | 0 | | TP3 |
| 57 | 1/25/2012 15:44 | 0 | | 0 | 0 | | TP3 |
| 58 | 1/25/2012 15:45 | 0 | | 0 | 0 | | TP3 |
| 59 | 1/25/2012 15:46 | 0 | | 0 | 0 | | TP3 |
| AVERAGE READING TP3 | | | 2.7 | | | | |
| MAXIMUM READING TP3 | | | | 192.5 | | | |
| 1 | 1/26/2012 8:49 | 0 | | 0 | 0 | | TP4 |
| 2 | 1/26/2012 8:50 | 0 | | 0 | 0 | | TP4 |
| 3 | 1/26/2012 8:51 | 0 | | 0 | 0 | | TP4 |
| 4 | 1/26/2012 8:52 | 0 | | 0 | 0 | | TP4 |
| 5 | 1/26/2012 8:53 | 0 | | 0 | 0 | | TP4 |
| 6 | 1/26/2012 8:54 | 0 | | 0 | 0 | | TP4 |
| 7 | 1/26/2012 8:55 | 0 | | 0 | 0 | | TP4 |
| 8 | 1/26/2012 8:56 | 0 | | 0 | 0 | | TP4 |
| 9 | 1/26/2012 8:57 | 0 | | 0 | 0 | | TP4 |
| 10 | 1/26/2012 8:58 | 0 | | 0 | 0 | | TP4 |
| 11 | 1/26/2012 8:59 | 0 | | 0 | 0 | | TP4 |
| 12 | 1/26/2012 9:00 | 0 | | 0 | 0 | | TP4 |
| 13 | 1/26/2012 9:01 | 0 | | 0 | 0 | | TP4 |
| 14 | 1/26/2012 9:02 | 0 | | 0 | 0 | | TP4 |

TABLE 3
Summary of PID Readings From Test Pit Excavations
Riverside Avenue Sit
Newark, NJ

DRAFT

Instrument: MiniRAE 2000 (PGM7600) Serial Number: 013459
Data Points: 295 Gas Name: Isobutylene Sample Period: 60 sec
Last Calibration Time: 01/20/2012 13:38

| Measurement Type: | | Min(ppm) | Avg(ppm) | Max(ppm) | | | | | |
|--------------------|-----------|----------|----------|----------|----------|-------|----------|-------|------------|
| High Alarm Levels: | | 100 | 100 | 100 | | | | | |
| Low Alarm Levels: | | 50 | 50 | 50 | | | | | |
| Line# | Date | Time | Min(ppm) | Alarm | Avg(ppm) | Alarm | Max(ppm) | Alarm | TEST PIT # |
| 15 | 1/26/2012 | 9:03 | 0 | | 0 | | 0 | | TP4 |
| 16 | 1/26/2012 | 9:04 | 0 | | 0 | | 0 | | TP4 |
| 17 | 1/26/2012 | 9:05 | 0 | | 0 | | 0 | | TP4 |
| 18 | 1/26/2012 | 9:06 | 0 | | 0 | | 0 | | TP4 |
| 19 | 1/26/2012 | 9:07 | 0 | | 0 | | 0 | | TP4 |
| 20 | 1/26/2012 | 9:08 | 0 | | 0 | | 0 | | TP4 |
| 21 | 1/26/2012 | 9:09 | 0 | | 0 | | 0 | | TP4 |
| 22 | 1/26/2012 | 9:10 | 0 | | 0 | | 0 | | TP4 |
| 23 | 1/26/2012 | 9:11 | 0 | | 27.4 | | 109 H | | TP4 |
| 24 | 1/26/2012 | 9:12 | 0 | | 17.2 | | 129.8 H | | TP4 |
| 25 | 1/26/2012 | 9:13 | 0 | | 0 | | 0 | | TP4 |
| 26 | 1/26/2012 | 9:14 | 0 | | 0 | | 0 | | TP4 |
| 27 | 1/26/2012 | 9:15 | 0 | | 0 | | 0 | | TP4 |
| 28 | 1/26/2012 | 9:16 | 0 | | 0 | | 0 | | TP4 |
| 29 | 1/26/2012 | 9:17 | 0 | | 0 | | 0 | | TP4 |
| 30 | 1/26/2012 | 9:18 | 0 | | 0 | | 0 | | TP4 |
| 31 | 1/26/2012 | 9:19 | 0 | | 0 | | 0 | | TP4 |
| 32 | 1/26/2012 | 9:20 | 0 | | 0 | | 2.2 | | TP4 |
| 33 | 1/26/2012 | 9:21 | 0 | | 16.4 | | 153.5 H | | TP4 |
| 34 | 1/26/2012 | 9:22 | 0 | | 3.3 | | 75.9 L | | TP4 |
| 35 | 1/26/2012 | 9:23 | 0 | | 2.3 | | 21.4 | | TP4 |
| 36 | 1/26/2012 | 9:24 | 0 | | 0 | | 0 | | TP4 |
| 37 | 1/26/2012 | 9:25 | 0 | | 0 | | 0 | | TP4 |
| 38 | 1/26/2012 | 9:26 | 0 | | 0 | | 0 | | TP4 |
| 39 | 1/26/2012 | 9:27 | 0 | | 0 | | 0 | | TP4 |
| 40 | 1/26/2012 | 9:28 | 0 | | 0 | | 0 | | TP4 |
| 41 | 1/26/2012 | 9:29 | 0 | | 0 | | 0 | | TP4 |
| 42 | 1/26/2012 | 9:30 | 0 | | 0 | | 0 | | TP4 |
| 43 | 1/26/2012 | 9:31 | 0 | | 0 | | 0 | | TP4 |
| 44 | 1/26/2012 | 9:32 | 0 | | 0 | | 0 | | TP4 |
| 45 | 1/26/2012 | 9:33 | 0 | | 0.2 | | 2.1 | | TP4 |
| 46 | 1/26/2012 | 9:34 | 0 | | 0 | | 0 | | TP4 |
| 47 | 1/26/2012 | 9:35 | 0 | | 0 | | 0 | | TP4 |
| 48 | 1/26/2012 | 9:36 | 0 | | 0 | | 0 | | TP4 |
| 49 | 1/26/2012 | 9:37 | 0 | | 0 | | 0 | | TP4 |
| 50 | 1/26/2012 | 9:38 | 0 | | 0.1 | | 2 | | TP4 |
| 51 | 1/26/2012 | 9:39 | 0 | | 16.8 | | 37.6 | | TP4 |
| 52 | 1/26/2012 | 9:40 | 10.1 | | 21 | | 50.1 L | | TP4 |
| 53 | 1/26/2012 | 9:41 | 0 | | 4.9 | | 23.1 | | TP4 |
| 54 | 1/26/2012 | 9:42 | 0 | | 0 | | 0 | | TP4 |
| 55 | 1/26/2012 | 9:43 | 0 | | 0 | | 0 | | TP4 |
| 56 | 1/26/2012 | 9:44 | 0 | | 0 | | 0 | | TP4 |
| 57 | 1/26/2012 | 9:45 | 0 | | 0 | | 0 | | TP4 |
| 58 | 1/26/2012 | 9:46 | 0 | | 0 | | 0 | | TP4 |
| 59 | 1/26/2012 | 9:47 | 0 | | 0 | | 0 | | TP4 |
| 60 | 1/26/2012 | 9:48 | 0 | | 0 | | 0 | | TP4 |
| 61 | 1/26/2012 | 9:49 | 0 | | 0 | | 0 | | TP4 |
| 62 | 1/26/2012 | 9:50 | 0 | | 0 | | 0 | | TP4 |
| 63 | 1/26/2012 | 9:51 | 0 | | 0 | | 0 | | TP4 |
| 64 | 1/26/2012 | 9:52 | 0 | | 0 | | 0 | | TP4 |
| 65 | 1/26/2012 | 9:53 | 0 | | 0 | | 0 | | TP4 |
| 66 | 1/26/2012 | 9:54 | 0 | | 0 | | 0 | | TP4 |
| 67 | 1/26/2012 | 9:55 | 0 | | 0 | | 0 | | TP4 |
| 68 | 1/26/2012 | 9:56 | 0 | | 0 | | 0 | | TP4 |

TABLE 3
 Summary of PID Readings From Test Pit Excavations
 Riverside Avenue Site
 Newark, NJ

Instrument: MiniRAE 2000 (PGM7600) Serial Number: 013459
 Data Points: 295 Gas Name: Isobutylene Sample Period: 60 sec
 Last Calibration Time: 01/20/2012 13:38

| Measurement Type: | | Min(ppm) | Avg(ppm) | Max(ppm) | | | | |
|----------------------------|-----------|----------|----------|----------|------------|--------------|-------|------------|
| High Alarm Levels: | | 100 | 100 | 100 | | | | |
| Low Alarm Levels: | | 50 | 50 | 50 | | | | |
| Line# | Date | Time | Min(ppm) | Alarm | Avg(ppm) | Max(ppm) | Alarm | TEST PIT # |
| 69 | 1/26/2012 | 9:57 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 70 | 1/26/2012 | 9:58 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 71 | 1/26/2012 | 9:59 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 72 | 1/26/2012 | 10:00 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 73 | 1/26/2012 | 10:01 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 74 | 1/26/2012 | 10:02 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 75 | 1/26/2012 | 10:03 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 76 | 1/26/2012 | 10:04 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 77 | 1/26/2012 | 10:05 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 78 | 1/26/2012 | 10:06 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 79 | 1/26/2012 | 10:07 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 80 | 1/26/2012 | 10:08 | 0 | 0 | 0 | 0 | 0 | TP4 |
| 81 | 1/26/2012 | 10:09 | 0 | 0 | 0 | 0 | 0 | TP4 |
| AVERAGE READING TP4 | | | | | 1.4 | | | |
| MAXIMUM READING TP4 | | | | | | 153.5 | | |
| 82 | 1/26/2012 | 10:10 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 83 | 1/26/2012 | 10:11 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 84 | 1/26/2012 | 10:12 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 85 | 1/26/2012 | 10:13 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 86 | 1/26/2012 | 10:14 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 87 | 1/26/2012 | 10:15 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 88 | 1/26/2012 | 10:16 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 89 | 1/26/2012 | 10:17 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 90 | 1/26/2012 | 10:18 | 0 | 17 | 97.7 | L | 97.7 | TP5 |
| 91 | 1/26/2012 | 10:19 | 0 | 39.8 | 200.7 | H | 200.7 | TP5 |
| 92 | 1/26/2012 | 10:20 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 93 | 1/26/2012 | 10:21 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 94 | 1/26/2012 | 10:22 | 0 | 0.5 | 12 | | 12 | TP5 |
| 95 | 1/26/2012 | 10:23 | 0 | 0.5 | 19.6 | | 19.6 | TP5 |
| 96 | 1/26/2012 | 10:24 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 97 | 1/26/2012 | 10:25 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 98 | 1/26/2012 | 10:26 | 0 | 0 | 0 | 0 | 0 | TP5 |
| 99 | 1/26/2012 | 10:27 | 0 | 0 | 0.2 | | 0.2 | TP5 |
| AVERAGE READING TP5 | | | | | 1.8 | | | |
| MAXIMUM READING TP5 | | | | | | 200.7 | | |

Note: Due to inclement weather on 1/27/12, the PID was not used to screen soil samples collected from test pit TP6.

TABLE 4
SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | TP1-1 | | TP1-1 DL | | TP1-2 | | TP1-2 DL | | TP1-3 | | TP1-3 DL | | TP2-1 | | |
|---------------------------------------|-----------------|--------|----------|--------|-----------------|--------|----------|--------|-----------------|--------|----------|--------|-----------------|--------|------|
| Test Pit ID | 1 | | | | 1 | | | | 1 | | | | 2 | | |
| Sample Interval (ft bgs) | 4 | | | | 8 | | | | 10 | | | | 4 | | |
| Laboratory Sample ID | B41H2 | | B41H2 DL | | B41H3 | | B41H3 DL | | B41H4 | | B41H4 DL | | B41H5 | | |
| Matrix | Soil | | | | Soil | | | | Soil | | | | Soil | | |
| Field QC | | | | | | | | | | | | | | | |
| Laboratory | A4 | | | | A4 | | | | A4 | | | | A4 | | |
| Analytical Method | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | | |
| Sample Collection Date | 1/25/2012 | | | | 1/25/2012 | | | | 1/25/2012 | | | | 1/25/2012 | | |
| Sample Collection Time | 11:00 | | | | 11:20 | | | | 11:45 | | | | 12:25 | | |
| Dilution | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| % Moisture | 17 | | | | 14 | | | | 17 | | | | 19 | | |
| Units | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | |
| Analyte | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,1-Trichloroethane | 1000 | | | | | | | | | 1.5 | UJ | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | | | | | | | | | 1.5 | UJ | | | | |
| 1,1,2-Trichloroethane | 420 | | | | | | | | | 1.5 | UJ | | | | |
| 1,2-Dibromomethane | | | | | | | | | | 1.5 | UJ | | | | |
| 1,2-Dichloroethane | 1000 | | | | | | | | | 1.5 | UJ | | | | |
| Benzene | 13 | | | | | 1.7 | J | | | 1.3 | J | | | | |
| Bromomethane | 1000 | | | | | | | | | | | | | | |
| Carbon Disulfide | | | | | | | | | | | | | | | |
| Carbon tetrachloride | 4 | | | | | | | | | 1.5 | UJ | | | | |
| Chloroethane | | | | | | | | | | | | | | | |
| Chloromethane | 1000 | | | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | | | | | | | | | | | | | | | |
| Cyclohexane | | 0.61 | J | | | | | 1 | J | | | | | | |
| Dichlorodifluoromethane | | | | | | | | | | | | | | | |
| Ethylbenzene | 1000 | 37 | | 42 | | 110 | | 130 | | 28 | | 58 | | | |
| Isopropylbenzene | | 10 | | 11 | J | 18 | | 18 | | 8.1 | | 16 | | 0.86 | |
| m,p-Xylene | 1000 | 270 | | 270 | | 480 | | 480 | | 0.21 | | 21 | | 1.6 | |
| Methyl acetate | | | | | | | | | | 1.5 | UJ | | | | |
| Methyl tert-butyl ether | | | | | | | | | | 1.5 | UJ | | | | |
| Methylcyclohexane | | 17 | | 15 | | 20 | | | | 7.6 | | | | 4.1 | |
| Methylene chloride | 210 | | | | | | | | | 1.5 | UJ | | | | |
| o-Xylene | 1000 | 19 | | 21 | | 37 | | 39 | | 7.8 | | 16 | | 0.48 | |
| Toluene | 1000 | 0.76 | J | | | 2.9 | J | | | 0.77 | J | | | | |
| trans-1,3-Dichloropropene | | | | | | | | | | 1.5 | UJ | | | | |
| Tetrachloroethene | 6 | | | | | | | | | | | | | | |
| Trichloroethene | 54 | 0.64 | J | | | 2.8 | J | 3.5 | J | 0.34 | J | | | | |
| Trichlorofluoromethane | | | | | | | | | | 1.5 | UJ | | | | |
| Vinyl chloride | | 7 | | | | | | | 12 | UJ | | | | | |

Notes

DL - diluted sample

J - estimated

U - not detected

ft bgs - feet below ground surface

CLP SOW/SOM01.2 - inductively coupled plasma atomic emission spectroscopy

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Criteria

mg/kg = milligrams per kilogram

TP - test pit

1000

Exceeds NJ NRDCSCC

TABLE 4
SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | TP2-2 | | TP2-2 DL | | TP2-3 | | TP2-3 DL | | TP3-1 | | TP3-1 DL | | TP3-2 | | TP3-2 DL | | TP3-3 | |
|---------------------------------------|---------|-----------------|------|----------|------|-----------------|------|----------|------|-----------------|------|----------|------|-----------------|------|----------|------|-----------------|------|
| Test Pit ID | | 2 | | | | 2 | | | | 3 | | | | 3 | | | | 3 | |
| Sample Interval (ft bgs) | | 8 | | | | 10 | | | | 4 | | | | 8 | | | | 10 | |
| Laboratory Sample ID | | B41H6 | | B41H6 DL | | B41H7 | | B41H7 DL | | B41H8 | | B41H8 DL | | B41H9 | | B41H9 DL | | B41J0 | |
| Matrix | | Soil | | | | Soil | | | | Soil | | | | Soil | | | | Soil | |
| Field QC | | | | | | | | | | | | | | | | | | | |
| Laboratory | | A4 | | | | A4 | | | | A4 | | | | A4 | | | | A4 | |
| Analytical Method | | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | |
| Sample Collection Date | | 1/25/2012 | | | | 1/25/2012 | | | | 1/25/2012 | | | | 1/25/2012 | | | | 1/25/2012 | |
| Sample Collection Time | | 12:45 | | | | 13:00 | | | | 15:00 | | | | 15:15 | | | | 15:30 | |
| Dilution | | 1 | | | | 1 | | | | 1 | | | | 1 | | | | 1 | |
| % Moisture | | 18 | | | | 15 | | | | 15 | | | | 14 | | | | 16 | |
| Units | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Analyte | NRDCSCC | Result | Flag | Result | Flag | Result | Flag |
| 1,1,1-Trichloroethane | 1000 | | | 1.4 | UJ | | | | | | | | | | | | | 1500 | UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | | | 1.4 | UJ | | | | | | | | | | | | | 1500 | UJ |
| 1,1,2-Trichloroethane | 420 | | | 1.4 | UJ | | | | | | | | | | | | | | |
| 1,2-Dibromomethane | | | | 1.4 | UJ | | | | | | | | | | | | | 1500 | UJ |
| 1,2-Dichloroethane | 1000 | | | 1.4 | UJ | | | | | | | | | | | | | 1500 | UJ |
| Benzene | 13 | | | | | 0.33 | | | | | | | | | | | | | |
| Bromomethane | 1000 | | | | | 290 | UJ | | | | | | | | | | | 270 | UJ |
| Carbon Disulfide | | | | | | 0.29 | UJ | | | | | | | | | | | 270 | UJ |
| Carbon tetrachloride | 4 | 0.58 | UJ | | | | | 1500 | UJ | 1500 | UJ | | | | | | | 1500 | UJ |
| Chloroethane | | | | | | 290 | UJ | | | | | | | | | | | 270 | UJ |
| Chloromethane | 1000 | | | | | 290 | UJ | | | | | | | | | | | 270 | UJ |
| cis-1,2-Dichloroethene | | | | | | | | | | | | | | | | | | | |
| Cyclohexane | | 1.6 | | 1.4 | J | 710 | | 750 | J | 1600 | | 2100 | J | 2700 | | 2500 | | | |
| Dichlorodifluoromethane | | | | | | 290 | UJ | | | | | | | | | | | 270 | UJ |
| Ethylbenzene | 1000 | | | 1.3 | J | | | | | | | | | | | | | | |
| Isopropylbenzene | | 15 | J | 13 | | 3400 | | 3200 | | 5500 | | 5500 | J | 14000 | J | 15000 | | 650 | |
| m,p-Xylene | 1000 | 4.8 | J | 4.2 | | 300 | | | | | | | | | | | | 1000 | J |
| Methyl acetate | | | | 1.4 | UJ | | | | | | | | | | | | | 1500 | UJ |
| Methyl tert-butyl ether | | | | 1.4 | UJ | | | | | | | | | | | | | 1500 | UJ |
| Methylcyclohexane | | 47 | | 47 | | 16000 | | 16000 | | 70000 | | 70000 | | 48000 | | 48000 | | 2100 | |
| Methylene chloride | 210 | | | 1.4 | UJ | | | | | | | | | | | | | 1500 | UJ |
| o-Xylene | 1000 | 0.49 | J | | | | | | | | | | | | | | | | |
| Toluene | 1000 | | | | | | | | | | | | | | | | | 130 | J |
| trans-1,3-Dichloropropene | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 6 | | | | | | | | | | | | | | | | | | |
| Trichloroethene | 54 | | | 0.99 | J | | | | | | | | | | | | | | |
| Trichlorofluoromethane | | | | | | 1.4 | UJ | | | | | | | | | | | 1500 | UJ |
| Vinyl chloride | 7 | | | | | | | | | | | | | | | | | | |

Notes

DL - diluted sample

J - estimated

U - not detected

ft bgs - feet below ground surface

CLP SOW/SOM01.2 - inductively coupled plasma atom

NRDCSCC - NJ Non-Residential Direct Contact Soil Clea

mg/kg = milligrams per kilogram

TP - test pit

1000

Exceeds NJ NRI

TABLE 4
SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | TP4-1 | TP4-2 | | TP4-3 | | TP5-1 | | TP5-1 DL | | TP5-2 | | TP5-2 DL | | TP5-3 | | TP5-3 DL | |
|---------------------------------------|-----------------|-----------------|------|-----------------|------|-----------------|------|----------|------|-----------------|------|----------|------|-----------------|------|----------|------|
| Test Pit ID | 4 | 4 | | 4 | | 5 | | | | 5 | | | | 5 | | | |
| Sample Interval (ft bgs) | 4 | 8 | | 10 | | 4 | | | | 8 | | | | 10 | | | |
| Laboratory Sample ID | BOAA9 | BOAB0 | | BOAB1 | | BOAB2 | | BOAB2DL | | BOAB3 | | BOAB3DL | | BOAB4 | | BOAB4DL | |
| Matrix | Soil | Soil | | Soil | | Soil | | | | Soil | | | | Soil | | | |
| Field QC | | | | | | | | | | | | | | | | | |
| Laboratory | A4 | A4 | | A4 | | A4 | | | | A4 | | | | A4 | | | |
| Analytical Method | CLP SOW/SOM01.2 | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | | | |
| Sample Collection Date | 1/26/2012 | 1/26/2012 | | 1/26/2012 | | 1/26/2012 | | | | 1/26/2012 | | | | 1/27/2012 | | | |
| Sample Collection Time | 9:15 | 9:30 | | 9:45 | | 10:30 | | | | 10:30 | | | | 10:15 | | | |
| Dilution | 1 | 1 | | 1 | | 1 | | | | 1 | | | | 1 | | | |
| % Moisture | 12 | 18 | | 16 | | 12 | | | | 11 | | | | 15 | | | |
| Units | mg/kg | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Analyte | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,1-Trichloroethane | 1000 | | | | | | | 0.19 | J | | | 0.18 | J | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | | | | | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | 420 | | | | | | | | | | | | | | | | |
| 1,2-Dibromomethane | | | | | | | | | | | | | | | | | |
| 1,2-Dichloroethane | 1000 | | | | | | | | | | | | | | | | |
| Benzene | 13 | | | | | | | 0.12 | J | | | | | | | 0.048 | J |
| Bromomethane | 1000 | | | | | | | | | | | | | | | | |
| Carbon Disulfide | | | | | | | | | | | | | | | | | |
| Carbon tetrachloride | 4 | | | | | | | | | | | | | | | | |
| Chloroethane | | | | | | | | | | | | | | | | | |
| Chloromethane | 1000 | | | | | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | | | | | | | | | | | | | | | | | |
| Cyclohexane | | | | | | | | 0.55 | | | | 0.48 | | | | 0.26 | J |
| Dichlorodifluoromethane | | | | | | | | | | | | | | | | | |
| Ethylbenzene | 1000 | | | | | | | 120 | | 120 | | 82 | | 82 | | 75 | |
| Isopropylbenzene | 4.1 | | 2.2 | | 0.55 | | | 9.5 | | 12 | J | 8.2 | | 9.6 | J | 3.4 | 5.1 |
| m,p-Xylene | 1000 | | | | | | | 460 | | 460 | | 320 | | 320 | | 300 | |
| Methyl acetate | | | | | | | | | | | | | | | | | |
| Methyl tert-butyl ether | | | | | | | | | | | | | | | | | |
| Methylcyclohexane | 11 | | 3.4 | | 0.29 | J | 11 | J | 18 | J | 10 | J | 15 | J | 5 | | 10 |
| Methylene chloride | 210 | | | | | | | 0.52 | | | | | | | | | |
| o-Xylene | 1000 | | | | | | | 37 | | 37 | | 24 | | 24 | | 15 | J |
| Toluene | 1000 | | | | | | | 2.7 | | | | 1.4 | | | | 1.2 | |
| trans-1,3-Dichloropropene | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 6 | | | | | | | | | | | | | | | 0.22 | J |
| Trichloroethene | 54 | | | | | | | 2.4 | | | | 1.7 | | | | 1.1 | |
| Trichlorofluoromethane | | | | | | | | | | | | | | | | | |
| Vinyl chloride | 7 | | | | | | | | | | | | | | | | |

Notes

DL - diluted sample

J - estimated

U - not detected

ft bgs - feet below ground surface

CLP SOW/SOM01.2 - inductively coupled plasma atom

NRDCSCC - NJ Non-Residential Direct Contact Soil Clea

mg/kg = milligrams per kilogram

TP - test pit

1000 Exceeds NJ NRI

TABLE 4
SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | TP6-1 | | TP6-1 DL | | TP6-2 | | TP6-2 DL | | TP6-2 RE | | TP6-3 | | TP6-3 DL |
|---------------------------------------|---------|-----------------|------|----------|------|-----------------|------|----------|------|----------|------|-----------------|------|----------|
| Test Pit ID | | 6 | | | | 6 | | | | | | 6 | | |
| Sample Interval (ft bgs) | | 4 | | | | 8 | | | | | | 10 | | |
| Laboratory Sample ID | | BOAB5 | | BOAB5DL | | BOAB6 | | BOAB6DL | | BOAB6RE | | BOAB7 | | BOAB7DL |
| Matrix | | Soil | | | | Soil | | | | | | Soil | | |
| Field QC | | Dupl. of TP7-1 | | | | Dupl. of TP7-2 | | | | | | | | |
| Laboratory | | A4 | | | | A4 | | | | | | A4 | | |
| Analytical Method | | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | | | | | | CLP SOW/SOM01.2 | | |
| Sample Collection Date | | 1/27/2012 | | | | 1/27/2012 | | | | | | 1/27/2012 | | |
| Sample Collection Time | | 10:50 | | | | 11:45 | | | | | | 12:15 | | |
| Dilution | | 1 | | | | 1 | | | | | | 1 | | |
| % Moisture | | 27 | | | | 14 | | | | | | 16 | | |
| Units | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg |
| Analyte | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result |
| 1,1,1-Trichloroethane | 1000 | 0.33 | J | | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | 420 | | | | | | | | | | | | | |
| 1,2-Dibromomethane | | | | | | | | | | | | | | |
| 1,2-Dichloroethane | 1000 | | | | | | | | | | | | | |
| Benzene | 13 | 0.2 | J | | | | | | | 0.033 | J | | | |
| Bromomethane | 1000 | | | | | | | | | | | | | |
| Carbon Disulfide | | | | | | | | | | | | | | |
| Carbon tetrachloride | 4 | | | | | | | | | | | | | |
| Chloroethane | | | | | | | | | | | | | | |
| Chloromethane | 1000 | | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | | 0.42 | | | | | | | | | | | | |
| Cyclohexane | | 0.41 | | | 0.34 | | | | | 0.4 | | 0.6 | | 0.6 |
| Dichlorodifluoromethane | | | | | | | | | | | | | | |
| Ethylbenzene | 1000 | 400 | | 400 | | 28 | | 28 | | 22 | J | 0.81 | J | 0.87 |
| Isopropylbenzene | | 4.2 | | | | 4.2 | | | 5 | J | 4.5 | J | 16 | |
| m,p-Xylene | 1000 | 1600 | | 1600 | | 110 | | 110 | | 76 | J | 3 | J | 3.1 |
| Methyl acetate | | | | | | | | | | | | | | |
| Methyl tert-butyl ether | | | | | | | | | | | | | | |
| Methylcyclohexane | | 5.3 | | | | 7.2 | | | | 8 | | 27 | | 27 |
| Methylene chloride | 210 | | | | | | | | | | | | | |
| o-Xylene | 1000 | 110 | | 110 | | 6.5 | | 7.9 | J | 6.9 | J | 0.25 | J | |
| Toluene | 1000 | 3.3 | | | | 0.41 | | | | 0.38 | J | 0.1 | J | |
| trans-1,3-Dichloropropene | | | | | | | | | | | | | | |
| Tetrachloroethene | 6 | 0.91 | | | | | | | | 0.1 | J | | | |
| Trichloroethene | 54 | 3.5 | | | | 0.44 | | | | 0.43 | J | | | |
| Trichlorofluoromethane | | | | | | | | | | | | | | |
| Vinyl chloride | | 7 | | | | | | | | | | | | |

Notes

DL - diluted sample

J - estimated

U - not detected

ft bgs - feet below ground surface

CLP SOW/SOM01.2 - inductively coupled plasma atom

NRDCSCC - NJ Non-Residential Direct Contact Soil Clea

mg/kg = milligrams per kilogram

TP - test pit

1000

Exceeds NJ NRI

TABLE 4
SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | TP7-1 | | TP7-1 DL | | TP7-2 | | TP7-2 DL | |
|---------------------------------------|---------|-----------------|------|----------|------|-----------------|------|----------|------|
| Test Pit ID | | 6 | | | | 6 | | | |
| Sample Interval (ft bgs) | | 4 | | | | 8 | | | |
| Laboratory Sample ID | | BOAB8 | | BOAB8DL | | BOAB9 | | BOAB9DL | |
| Matrix | | Soil | | | | Soil | | | |
| Field QC | | Dupl. of TP6-1 | | | | Dupl. of TP6-2 | | | |
| Laboratory | | A4 | | | | A4 | | | |
| Analytical Method | | CLP SOW/SOM01.2 | | | | CLP SOW/SOM01.2 | | | |
| Sample Collection Date | | 1/27/2012 | | | | 1/27/2012 | | | |
| Sample Collection Time | | 12:45 | | | | 13:00 (11:45) | | | |
| Dilution | | 1 | | | | 1 | | | |
| % Moisture | | 17 | | | | 17 | | | |
| Units | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Analyte | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 1,1,1-Trichloroethane | 1000 | 0.28 | J | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | | | | | | | | |
| 1,1,2-Trichloroethane | 420 | | | | | | | | |
| 1,2-Dibromomethane | | | | | | | | | |
| 1,2-Dichloroethane | 1000 | | | | | | | | |
| Benzene | 13 | 0.23 | J | | | | | | |
| Bromomethane | 1000 | | | | | | | | |
| Carbon Disulfide | | | | | | | | | |
| Carbon tetrachloride | 4 | | | | | | | | |
| Chloroethane | | | | | | | | | |
| Chloromethane | 1000 | | | | | | | | |
| cis-1,2-Dichloroethene | | 0.39 | | | | | | | |
| Cyclohexane | | 0.31 | | | | 0.42 | | | |
| Dichlorodifluoromethane | | | | | | | | | |
| Ethylbenzene | 1000 | 280 | | 280 | | 27 | | 27 | |
| Isopropylbenzene | | 3.4 | | 8.1 | J | 5.1 | | 6 | J |
| m,p-Xylene | 1000 | 1100 | | 1100 | | 100 | | 100 | |
| Methyl acetate | | | | | | | | | |
| Methyl tert-butyl ether | | | | | | | | | |
| Methylcyclohexane | | 3.6 | | 12 | J | 9.4 | | | |
| Methylene chloride | 210 | 0.65 | | | | | | | |
| o-Xylene | 1000 | 83 | | 83 | | 6.7 | | 7.6 | J |
| Toluene | 1000 | 3 | | | | 0.41 | | | |
| trans-1,3-Dichloropropene | | | | | | | | | |
| Tetrachloroethene | 6 | 0.68 | | | | 0.096 | J | | |
| Trichloroethene | 54 | 2.6 | | | | 0.47 | | | |
| Trichlorofluoromethane | | | | | | | | | |
| Vinyl chloride | | 7 | | | | | | | |

Notes

DL - diluted sample

J - estimated

U - not detected

ft bgs - feet below ground surface

CLP SOW/SOM01.2 - inductively coupled plasma atom

NRDCSCC - NJ Non-Residential Direct Contact Soil Clea

mg/kg = milligrams per kilogram

TP - test pit

1000 Exceeds NJ NRI

TABLE 5
SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | TP1-1 | | TP1-2 | | TP1-3 | | TP2-1 | | TP2-2 | | TP2-3 | | TP3-1 |
|--------------------------|----------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|
| Test Pit ID | | 1 | | 1 | | 1 | | 2 | | 2 | | 2 | | 3 |
| Sample Interval (ft bgs) | | 4 | | 8 | | 10 | | 4 | | 8 | | 10 | | 4 |
| Laboratory Sample ID | | B0AA0 | | B0AA1 | | B0AA2 | | B0AA3 | | B0AA4 | | B0AA5 | | B0AA6 |
| Matrix | | Soil | | Soil | | Soil | | Soil | | Soil | | Soil | | Soil |
| Field QC | | | | | | | | | | | | | | |
| Laboratory | | A4 | | A4 | | A4 | | A4 | | A4 | | A4 | | A4 |
| Analytical Method | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 |
| Sample Collection Date | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 |
| Sample Collection Time | | 11:00 | | 11:20 | | 11:45 | | 12:25 | | 12:45 | | 13:00 | | 15:00 |
| Dilution | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 |
| % Moisture | | 17 | | 15 | | 16 | | 19 | | 18 | | 20 | | 16 |
| Units | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg |
| Compound | CAS # | NRDCSCC | Result | Flag |
| 1,1'-Biphenyl | 92-52-4 | | 0.23 | | 0.11 | J | 0.031 | J | | | | | 0.05 | J |
| 2,4-Dimethylphenol | 105-67-9 | 10000 | 0.09 | J | | | | | | | | | 0.049 | J |
| 2-Methylnaphthalene | 91-57-6 | | 2.2 | | 1.4 | | 0.44 | | 0.11 | J | 0.085 | J | 0.83 | |
| 4-Methylphenol | 106-44-5 | 10000 | | | | | | | | | | | 0.067 | J |
| Acenaphthene | 83-32-9 | 10000 | 0.25 | | 0.14 | J | 0.047 | J | 0.35 | | 0.048 | J | 0.1 | J |
| Acenaphthylene | 208-96-8 | | | | | | | | | | | | | |
| Acetophenone | 98-86-2 | | | | | | 0.15 | J | | | | | | |
| Anthracene | 120-12-7 | 10000 | 0.23 | | 0.12 | J | 0.044 | J | 0.11 | J | 0.074 | J | 0.16 | J |
| Benzo(a)anthracene | 56-55-3 | | 0.29 | | 0.16 | J | 0.067 | J | 0.12 | J | 0.2 | J | 0.38 | |
| Benzo(a)pyrene | 50-32-8 | 4 | 0.29 | | 0.11 | J | 0.058 | J | 0.1 | J | 0.24 | | 0.37 | 0.54 |
| Benzo(b)fluoranthene | 205-99-2 | 4 | 0.2 | J | 0.071 | J | 0.047 | J | 0.12 | J | 0.26 | | 0.37 | 0.64 |
| Benzo(g,h,i)perylene | 191-24-2 | | 0.28 | | 0.089 | J | 0.049 | J | 0.094 | J | 0.2 | J | 0.27 | 0.57 |
| Benzo(k)fluoranthene | 207-08-9 | 4 | 0.18 | J | 0.071 | J | 0.034 | J | 0.08 | J | 0.16 | J | 0.27 | 0.38 |
| Carbazole | 86-74-8 | | 0.11 | J | 0.036 | J | 0.018 | J | | | | | 0.052 | J |
| Chrysene | 218-01-9 | 40 | 0.35 | | 0.18 | J | 0.081 | J | 0.11 | J | 0.2 | J | 0.38 | |
| Dibenz(a,h)anthracene | 53-70-3 | 0.66 | 0.049 | J | | | | | 0.03 | J | 0.035 | J | 0.096 | J |
| Dibenzofuran | 132-64-9 | | 0.1 | J | 0.052 | J | 0.017 | J | 0.046 | J | 0.02 | J | 0.046 | J |
| Diethylphthalate | 84-66-2 | 10000 | | | | | | | | | | | | |
| Fluoranthene | 206-44-0 | 10000 | 0.33 | | 0.18 | J | 0.086 | J | 0.36 | | 0.38 | | 0.57 | 0.55 |
| Fluorene | 86-73-7 | 10000 | 0.37 | | 0.19 | J | 0.067 | J | 0.26 | | 0.071 | J | 0.18 | J |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 4 | 0.25 | | 0.096 | J | 0.048 | J | 0.11 | J | 0.27 | | 0.39 | 0.78 |
| Naphthalene | 91-20-3 | 4200 | 0.45 | | 1.2 | J | 0.84 | | 0.086 | J | 0.11 | J | 0.11 | J |
| N-Nitrosodiphenylamine | 86-30-6 | 600 | 0.41 | | | | | | | | | | | |
| Phenanthrene | 85-01-8 | | 1.8 | | 0.93 | | 0.32 | | 0.59 | | 0.33 | | 0.98 | |
| Pyrene | 129-00-0 | 10000 | 0.66 | | 0.36 | | 0.15 | J | 0.43 | | 0.43 | | 0.73 | 0.76 |

Notes

DL - diluted sample

J - estimated

ft bgs - feet below ground surface

CLP SOW - Contract Lab Program Statement of Work

SOM - Superfund Organic Methods

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Criteria

mg/kg = milligrams per kilogram

TP - test pit

1000

Exceeds NJ NRDCSCC

TABLE 5
SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | TP3-2 | | TP3-3 | | TP4-1 | | TP4-2 | | TP4-3 | | TP5-1 | | TP5-1 DL |
|--------------------------|----------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|--------|-----------------|
| Test Pit ID | | 3 | | 3 | | 4 | | 4 | | 4 | | 5 | | |
| Sample Interval (ft bgs) | | 8 | | 10 | | 4 | | 8 | | 10 | | 4 | | |
| Laboratory Sample ID | | B0AA7 | | B0AA8 | | B0AA9 | | B0AB0 | | B0AB1 | | B0AB2 | | B0AB2DL |
| Matrix | | Soil | | Soil | | Soil | | Soil | | Soil | | Soil | | Soil |
| Field QC | | | | | | | | | | | | | | |
| Laboratory | | A4 | | A4 | | A4 | | A4 | | A4 | | A4 | | A5 |
| Analytical Method | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 | | CLP SOW/SOM01.2 |
| Sample Collection Date | | 1/25/2012 | | 1/25/2012 | | 1/26/2012 | | 1/26/2012 | | 1/26/2012 | | 1/26/2012 | | |
| Sample Collection Time | | 15:15 | | 15:30 | | 9:15 | | 9:30 | | 9:45 | | 10:30 | | |
| Dilution | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 2 |
| % Moisture | | 15 | | 13 | | 12 | | 18 | | 16 | | 12 | | |
| Units | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg |
| Compound | CAS # | NRDCSCC | Result | Flag |
| 1,1'-Biphenyl | 92-52-4 | | | | | | | | | | 0.079 | J | 0.078 | J |
| 2,4-Dimethylphenol | 105-67-9 | 10000 | | | | | | | | | 0.54 | | 0.67 | |
| 2-Methylnaphthalene | 91-57-6 | | 0.49 | J | 0.052 | J | 0.34 | | 0.32 | | 0.14 | J | 3.7 | 3.7 |
| 4-Methylphenol | 106-44-5 | 10000 | | | | | | | | | | | 0.33 | 0.34 |
| Acenaphthene | 83-32-9 | 10000 | 0.26 | J | | | 0.059 | J | 0.066 | J | 0.14 | J | 0.46 | 0.47 |
| Acenaphthylene | 208-96-8 | | | | 0.064 | J | | | | | 0.17 | J | | |
| Acetophenone | 98-86-2 | | | | | | | | 0.094 | J | 0.076 | J | | |
| Anthracene | 120-12-7 | 10000 | 0.31 | J | 0.036 | J | 0.031 | J | 0.17 | J | 0.18 | J | 0.52 | 0.54 |
| Benzo(a)anthracene | 56-55-3 | | 1.1 | J | 0.29 | | 0.077 | J | 1.3 | | 0.73 | | 1.2 | 1.3 |
| Benzo(a)pyrene | 50-32-8 | 4 | 1.2 | J | 0.23 | | 0.07 | J | 1.2 | | 0.71 | | 1.2 | 1.2 |
| Benzo(b)fluoranthene | 205-99-2 | 4 | 1.3 | J | 0.25 | | 0.059 | J | 0.75 | | 0.78 | | 1.3 | 1.4 |
| Benzo(g,h,i)perylene | 191-24-2 | | 1.1 | J | 0.13 | J | 0.078 | J | 0.62 | | 0.45 | | 0.94 | 1.1 |
| Benzo(k)fluoranthene | 207-08-9 | 4 | 1 | J | 0.17 | J | 0.069 | J | 0.69 | | 0.47 | | 0.74 | 0.81 |
| Carbazole | 86-74-8 | | | | | | | | | | 0.055 | J | 0.23 | 0.22 |
| Chrysene | 218-01-9 | 40 | 1.1 | J | 0.25 | | 0.081 | J | 1.2 | | 0.75 | | 1.2 | 1.3 |
| Dibenzo(a,h)anthracene | 53-70-3 | 0.66 | | | 0.055 | J | | | 0.22 | | 0.14 | J | 0.31 | 0.37 |
| Dibenzofuran | 132-64-9 | | 0.16 | J | 0.019 | J | 0.097 | J | 0.067 | J | 0.094 | J | 0.21 | 0.21 |
| Diethylphthalate | 84-66-2 | 10000 | | | | | | | 0.023 | J | 0.019 | | | |
| Fluoranthene | 206-44-0 | 10000 | 2.4 | | 0.19 | J | 0.13 | J | 1.5 | | 1.9 | | 1.7 | 1.8 |
| Fluorene | 86-73-7 | 10000 | 0.45 | J | 0.02 | J | 0.14 | J | 0.14 | J | 0.2 | J | 0.74 | 0.76 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 4 | 1.6 | J | 0.19 | J | 0.091 | J | 0.82 | | 0.69 | | 1.3 | 1.5 |
| Naphthalene | 91-20-3 | 4200 | 0.63 | J | 0.05 | J | 0.4 | | 0.27 | | 0.16 | J | 0.47 | 0.61 |
| N-Nitrosodiphenylamine | 86-30-6 | 600 | | | | | | | | | | | | |
| Phenanthrene | 85-01-8 | | | 1.5 | J | 0.064 | J | 0.15 | J | 0.66 | | 1.4 | | 3.5 |
| Pyrene | 129-00-0 | 10000 | 2.6 | | 0.21 | | 0.15 | J | 2.9 | | 1.7 | | 2.4 | 2.5 |

Notes

DL - diluted sample

J - estimated

ft bgs - feet below ground surface

CLP SOW - Contract Lab Program Statement of Work

SOM - Superfund Organic Methods

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Criteria

mg/kg = milligrams per kilogram

TP - test pit

1000

Exceeds NJ NR

TABLE 5
SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | TP5-2 | TP5-2 DL | TP5-3 | TP6-1 | TP6-1 DL | TP6-2 | TP6-3 |
|--------------------------|----------|-----------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Test Pit ID | | 5 | | 5 | 6 | | 6 | 6 |
| Sample Interval (ft bgs) | | 8 | | 10 | 4 | | 8 | 10 |
| Laboratory Sample ID | | B0AB3 | B0AB3DL | B0AB4 | B0AB5 | B0AB5DL | B0AB6 | B0AB7 |
| Matrix | | Soil | Soil | Soil | Soil | Soil | Soil | Soil |
| Field QC | | | | | Dupl. of TP7-1 | | Dupl. of TP7-2 | |
| Laboratory | | A4 | A5 | A4 | A4 | A5 | A4 | A4 |
| Analytical Method | | CLP SOW/SOM01.2 | LP SOW/SOM01. | CLP SOW/SOM01.2 |
| Sample Collection Date | | 1/26/2012 | | 1/27/2012 | 1/27/2012 | | 1/27/2012 | 1/27/2012 |
| Sample Collection Time | | 10:30 | | 10:15 | 10:50 | | 11:45 | 12:15 |
| Dilution | | 1 | 5 | 1 | 1 | 5 | 1 | 1 |
| % Moisture | | 11 | | 15 | 27 | | 14 | 16 |
| Units | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Compound | CAS # | NRDCSCC | Result | Flag | Result | Flag | Result | Flag |
| 1,1'-Biphenyl | 92-52-4 | | 0.18 | J | 0.19 | J | 0.1 | J |
| 2,4-Dimethylphenol | 105-67-9 | 10000 | 0.05 | J | | | 0.25 | |
| 2-Methylnaphthalene | 91-57-6 | | 3.9 | | 3.9 | | 3.1 | |
| 4-Methylphenol | 106-44-5 | 10000 | 0.057 | J | | | | |
| Acenaphthene | 83-32-9 | 10000 | 0.45 | | 0.45 | J | 0.34 | |
| Acenaphthylene | 208-96-8 | | | | | | 0.86 | |
| Acetophenone | 98-86-2 | | | | | | | |
| Anthracene | 120-12-7 | 10000 | 0.47 | | 0.4 | J | 0.39 | |
| Benzo(a)anthracene | 56-55-3 | | 0.66 | | 0.57 | J | 0.74 | |
| Benzo(a)pyrene | 50-32-8 | 4 | 0.44 | | 0.41 | J | 0.69 | |
| Benzo(b)fluoranthene | 205-99-2 | 4 | 0.47 | | 0.36 | J | 0.74 | |
| Benzo(g,h,i)perylene | 191-24-2 | | 0.32 | | 0.32 | J | 0.57 | |
| Benzo(k)fluoranthene | 207-08-9 | 4 | 0.24 | | 0.26 | J | 0.49 | |
| Carbazole | 86-74-8 | | 0.18 | J | 0.15 | J | 0.16 | J |
| Chrysene | 218-01-9 | 40 | 0.66 | | 0.62 | J | 0.8 | |
| Dibenz(a,h)anthracene | 53-70-3 | 0.66 | 0.11 | J | 0.099 | J | 0.2 | |
| Dibenzofuran | 132-64-9 | | 0.19 | | 0.21 | J | 0.16 | J |
| Diethylphthalate | 84-66-2 | 10000 | | | | | 0.46 | |
| Fluoranthene | 206-44-0 | 10000 | 0.82 | | 0.76 | J | 1 | |
| Fluorene | 86-73-7 | 10000 | 0.68 | | 0.67 | J | 0.56 | |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 4 | 0.42 | | 0.38 | J | 0.77 | J |
| Naphthalene | 91-20-3 | 4200 | 0.49 | | 0.45 | J | 0.54 | |
| N-Nitrosodiphenylamine | 86-30-6 | 600 | | | | | | |
| Phenanthrene | 85-01-8 | | 3 | | 3 | | 2.6 | |
| Pyrene | 129-00-0 | 10000 | 1.4 | | 1.2 | | 1.5 | |

Notes

DL - diluted sample

J - estimated

ft bgs - feet below ground surface

CLP SOW - Contract Lab Program Statement of Work

SOM - Superfund Organic Methods

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Criteria

mg/kg = milligrams per kilogram

TP - test pit

1000

Exceeds NJ NR

TABLE 5
SUMMARY OF SEMIVOLATILE ORGANIC COMPOUNDS DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | TP7-1 | TP7-1 DL | TP7-2 |
|--------------------------|----------|-----------------|-----------------|-----------------|
| Test Pit ID | | 6 | | 6 |
| Sample Interval (ft bgs) | | 4 | | 8 |
| Laboratory Sample ID | | B0AB8 | B0AB8DL | B0AB9 |
| Matrix | | Soil | Soil | Soil |
| Field QC | | Dupl. of TP6-1 | | Dupl. of TP6-2 |
| Laboratory | | A4 | A5 | A4 |
| Analytical Method | | CLP SOW/SOM01.2 | CLP SOW/SOM01.2 | CLP SOW/SOM01.2 |
| Sample Collection Date | | 1/27/2012 | | 1/27/2012 |
| Sample Collection Time | | 12:45 | | 13:00 (11:45) |
| Dilution | | 1 | 2 | 1 |
| % Moisture | | 17 | | 17 |
| Units | | mg/kg | mg/kg | mg/kg |
| Compound | CAS # | NRDCSCC | Result | Flag |
| 1,1'-Biphenyl | 92-52-4 | | 0.31 | |
| 2,4-Dimethylphenol | 105-67-9 | 10000 | 0.11 | J |
| 2-Methylnaphthalene | 91-57-6 | | 3.5 | |
| 4-Methylphenol | 106-44-5 | 10000 | | |
| Acenaphthene | 83-32-9 | 10000 | 0.35 | |
| Acenaphthylene | 208-96-8 | | | |
| Acetophenone | 98-86-2 | | | |
| Anthracene | 120-12-7 | 10000 | 0.36 | |
| Benzo(a)anthracene | 56-55-3 | | 0.62 | |
| Benzo(a)pyrene | 50-32-8 | 4 | 0.64 | |
| Benzo(b)fluoranthene | 205-99-2 | 4 | 0.83 | |
| Benzo(g,h,i)perylene | 191-24-2 | | 0.61 | |
| Benzo(k)fluoranthene | 207-08-9 | 4 | 0.34 | |
| Carbazole | 86-74-8 | | 0.2 | J |
| Chrysene | 218-01-9 | 40 | 0.76 | |
| Dibenzo(a,h)anthracene | 53-70-3 | 0.66 | 0.21 | |
| Dibenzofuran | 132-64-9 | | 0.14 | J |
| Diethylphthalate | 84-66-2 | 10000 | | |
| Fluoranthene | 206-44-0 | 10000 | 0.7 | |
| Fluorene | 86-73-7 | 10000 | 0.51 | |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 4 | 0.79 | J |
| Naphthalene | 91-20-3 | 4200 | 0.46 | |
| N-Nitrosodiphenylamine | 86-30-6 | 600 | | |
| Phenanthrene | 85-01-8 | | 2.5 | |
| Pyrene | 129-00-0 | 10000 | 1.3 | |
| | | | 1.3 | 0.39 |

Notes

DL - diluted sample

J - estimated

ft bgs - feet below ground surface

CLP SOW - Contract Lab Program Statement of Work

SOM - Superfund Organic Methods

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Criteria

mg/kg = milligrams per kilogram

TP - test pit

1000

Exceeds NJ NR

TABLE 6
SUMMARY OF PESTICIDES DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP1-1 | | TP1-2 | | TP1-3 | | TP2-1 | | TP2-2 | | TP2-3 | |
|--------------------------|------------|---------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Test Pit ID | | | 1 | | 1 | | 1 | | 2 | | 2 | | 2 | |
| Sample Interval (ft bgs) | | | 4 | | 8 | | 10 | | 4 | | 8 | | 10 | |
| Laboratory Sample ID | | | B0AA0 | | B0AA1 | | B0AA2 | | B0AA3 | | B0AA4 | | B0AA5 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | | 42187 | | 42187 | |
| SDG No. | | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | | | | | | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | |
| Sample Collection Date | | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | |
| Sample Collection Time | | | 11:00 | | 11:20 | | 11:45 | | 12:25 | | 12:45 | | 13:00 | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | | 17 | | 15 | | 16 | | 19 | | 18 | | 20 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag |
| 4,4'-DDD | 72-54-8 | 12 | 0.12 | NJ | 0.052 | J | 0.02 | NJ | | | | | | |
| 4,4'-DDE | 72-55-9 | 9 | 0.031 | R | 0.019 | J | | | | | 0.0045 | R | | |
| 4,4'-DDT | 50-29-3 | 9 | | | | | | | | | 0.016 | NJ | | |
| Aldrin | 309-00-2 | 0.17 | | | | | | | | | | | | |
| alpha-BHC | 319-84-6 | | | | | | | | | | | | | |
| alpha-Chlordane | 5103-71-9 | | | | | | | | | | | | | |
| beta-BHC | 319-85-7 | | | | | | | | | | | | | |
| delta-BHC | 319-86-8 | | | | | | | | | | | | | |
| Dieldrin | 60-57-1 | 0.18 | | | | | | | | | 0.0045 | R | | |
| Endosulfan I | 959-98-8 | | | | | | 0.0032 | R | | | | | | |
| Endosulfan II | 33213-65-9 | | 0.017 | R | | | | | | | | | | |
| Endosulfan sulfate | 1031-07-8 | | | | | | | | | | | | | |
| Endrin | 72-20-8 | 310 | | | | | | | | | | | | |
| Endrin aldehyde | 7421-93-4 | | | | | | | | | | | | | |
| Endrin ketone | 53494-70-5 | | 0.018 | R | | | | | | | | | | |
| gamma-BHC (Lindane) | 58-89-9 | | | | | | | | | | | | | |
| gamma-Chlordane | 5103-74-2 | | | | | | | | | | 0.0085 | NJ | | |
| Heptachlor | 76-44-8 | 0.65 | | | | | | | | | | | | |
| Heptachlor epoxide | 1024-57-3 | | | | | | | | | | | | | |
| Methoxychlor | 72-43-5 | 5200 | 0.044 | NJ | 0.015 | NJ | 0.013 | NJ | | | | | | |
| Toxaphene | 8001-35-2 | 0.2 | | | | | | | | | | | | |

Notes

J - estimated

JN - presumptive evidence for the presence of the material at an estimated value

R - rejected (unusable)

SDG - Sample Delivery Group

ft bgs - feet below ground surface

CLP SOW - Contract Laboratory Program Statement of Work

Pest - Pesticides

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mg/kg = milligrams per kilogram

TP - test pit

TABLE 6
SUMMARY OF PESTICIDES DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP3-1 | | TP3-2 | | TP3-3 | | TP4-1 | | TP4-2 | | TP4-3 | |
|--------------------------|------------|---------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Test Pit ID | | | 3 | | 3 | | 3 | | 4 | | 4 | | 4 | |
| Sample Interval (ft bgs) | | | 4 | | 8 | | 10 | | 4 | | 8 | | 10 | |
| Laboratory Sample ID | | | B0AA6 | | B0AA7 | | B0AA8 | | B0AA9 | | B0AB0 | | B0AB1 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | | 42187 | | 42187 | |
| SDG No. | | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | | | | | | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | |
| Sample Collection Date | | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/26/2012 | | 1/26/2012 | | 1/26/2012 | |
| Sample Collection Time | | | 15:00 | | 15:15 | | 15:30 | | 9:15 | | 9:30 | | 9:45 | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | | 16 | | 15 | | 13 | | 12 | | 18 | | 16 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag |
| 4,4'-DDD | 72-54-8 | 12 | | | | | | | | | | | | |
| 4,4'-DDE | 72-55-9 | 9 | | | | | | | | | | | | |
| 4,4'-DDT | 50-29-3 | 9 | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 0.17 | | | | | | | | | | | | |
| alpha-BHC | 319-84-6 | | | | | | | | | | | | | |
| alpha-Chlordane | 5103-71-9 | | | | | | | | | | | | | |
| beta-BHC | 319-85-7 | | | | | | | | | | | | | |
| delta-BHC | 319-86-8 | | | | | | | | | | | | | |
| Dieldrin | 60-57-1 | 0.18 | | | | | | | | | | | | |
| Endosulfan I | 959-98-8 | | | | | | | | | | | | | |
| Endosulfan II | 33213-65-9 | | | | | | | | | | | | | |
| Endosulfan sulfate | 1031-07-8 | | | | | | | | | | | | | |
| Endrin | 72-20-8 | 310 | | | | | | | | | | | | |
| Endrin aldehyde | 7421-93-4 | | | | | | | | | | | | | |
| Endrin ketone | 53494-70-5 | | | | | | | | | | | | | |
| gamma-BHC (Lindane) | 58-89-9 | | | | | | | | | | | | | |
| gamma-Chlordane | 5103-74-2 | | | | | | | | | | | | | |
| Heptachlor | 76-44-8 | 0.65 | | | | | | | | | | | | |
| Heptachlor epoxide | 1024-57-3 | | | | | | | | | | | | | |
| Methoxychlor | 72-43-5 | 5200 | | | | | | | | | | | | |
| Toxaphene | 8001-35-2 | 0.2 | | | | | | | | | | | | |

Notes

J - estimated

JN - presumptive evidence for the presence of the material at an

R - rejected (unusable)

SDG - Sample Delivery Group

ft bgs - feet below ground surface

CLP SOW - Contract Laboratory Program Statement of Work

Pest - Pesticides

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Criteria

mg/kg = milligrams per kilogram

TP - test pit

TABLE 6
SUMMARY OF PESTICIDES DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP5-1 | | TP5-2 | | TP5-3 | | TP6-1 | | TP6-1 MS | | TP6-1 MSD | | TP6-2 | |
|--------------------------|------------|---------|---------------|------|---------------|------|---------------|------|----------------|------|----------|------|-----------|------|----------------|------|
| Test Pit ID | | | 5 | | 5 | | 5 | | 6 | | | | | | 6 | |
| Sample Interval (ft bgs) | | | 4 | | 8 | | 10 | | 4 | | | | | | 8 | |
| Laboratory Sample ID | | | B0AB2 | | B0AB3 | | B0AB4 | | B0AB5 | | B0AB5MS | | B0AB5MSD | | B0AB6 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | | | | | | 42187 | |
| SDG No. | | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | | | | | | B0AA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | | | | | | Soil | |
| Field QC | | | | | | | | | Dupl. of TP7-1 | | | | | | Dupl. of TP7-2 | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | | | | | | A4 Scientific | |
| Analytical Method | | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | | | | | CLP SOW Pest | |
| Sample Collection Date | | | 1/26/2012 | | 1/26/2012 | | 1/27/2012 | | 1/27/2012 | | | | | | 1/27/2012 | |
| Sample Collection Time | | | 10:30 | | 10:30 | | 10:15 | | 10:50 | | | | | | 11:45 | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | | | | | | 1 | |
| % Moisture | | | 12 | | 11 | | 15 | | 27 | | | | | | 14 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 4,4'-DDD | 72-54-8 | 12 | 0.031 | R | | | 0.061 | J | 0.14 | R | 0.14 | NJ | 0.18 | R | 0.021 | J |
| 4,4'-DDE | 72-55-9 | 9 | | | 0.02 | R | | | 0.038 | R | 0.055 | J | 0.066 | R | 0.0085 | NJ |
| 4,4'-DDT | 50-29-3 | 9 | | | | | | | | | 0.053 | J | 0.065 | J | | |
| Aldrin | 309-00-2 | 0.17 | | | | | | | | | 0.04 | J | 0.042 | J | | |
| alpha-BHC | 319-84-6 | | | | | | | | | | | | | | | |
| alpha-Chlordane | 5103-71-9 | | | | | | | | | | | | | | | |
| beta-BHC | 319-85-7 | | | | | | | | | | | | | | | |
| delta-BHC | 319-86-8 | | | | | | | | | | | | | | | |
| Dieldrin | 60-57-1 | 0.18 | | | | | | | | | 0.54 | J | .065J | | | |
| Endosulfan I | 959-98-8 | | | | | | | | | | | | | | | |
| Endosulfan II | 33213-65-9 | | | | | | 0.024 | J | 0.021 | R | 0.027 | R | 0.038 | R | | |
| Endosulfan sulfate | 1031-07-8 | | | | | | | | | | | | | | | |
| Endrin | 72-20-8 | 310 | | | | | | | | | 0.072 | J | 0.079 | J | | |
| Endrin aldehyde | 7421-93-4 | | | | | | | | | | | | | | | |
| Endrin ketone | 53494-70-5 | | 0.052 | J | 0.019 | R | 0.011 | R | 0.026 | R | 0.0099 | R | 0.038 | R | | |
| gamma-BHC (Lindane) | 58-89-9 | | | | | | | | | | 0.039 | J | 0.041 | J | | |
| gamma-Chlordane | 5103-74-2 | | | | | | | | | | | | | | | |
| Heptachlor | 76-44-8 | 0.65 | | | | | | | | | 0.042 | J | 0.042 | J | | |
| Heptachlor epoxide | 1024-57-3 | | | | | | | | | | | | | | | |
| Methoxychlor | 72-43-5 | 5200 | | | 0.051 | NJ | | | 0.079 | R | 0.043 | NJ | 0.034 | R | | |
| Toxaphene | 8001-35-2 | 0.2 | | | | | | | | | | | | | | |

Notes

J - estimated

JN - presumptive evidence for the presence of the material at an

R - rejected (unusable)

SDG - Sample Delivery Group

ft bgs - feet below ground surface

CLP SOW - Contract Laboratory Program Statement of Work

Pest - Pesticides

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Criteria

mg/kg = milligrams per kilogram

TP - test pit

TABLE 6
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RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | TP6-3 | | TP7-1 | | TP7-2 | |
|--------------------------|---------------|---------|----------------|------|----------------|------|
| Test Pit ID | 6 | | 6 | | 6 | |
| Sample Interval (ft bgs) | 10 | | 4 | | 8 | |
| Laboratory Sample ID | BOAB7 | | BOAB8 | | BOAB9 | |
| Case No. | 42187 | | 42187 | | 42187 | |
| SDG No. | BOAA1 | | BOAA1 | | BOAA1 | |
| Matrix | Soil | | Soil | | Soil | |
| Field QC | | | Dupl. of TP6-1 | | Dupl. of TP6-2 | |
| Laboratory | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | |
| Sample Collection Date | 1/27/2012 | | 1/27/2012 | | 1/27/2012 | |
| Sample Collection Time | 12:15 | | 12:45 | | 13:00 (11:45) | |
| Dilution | 1 | | 1 | | 1 | |
| % Moisture | 16 | | 17 | | 17 | |
| Units | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag | Result | Flag |
| 4,4'-DDD | 72-54-8 | 12 | | | 0.061 | NJ |
| 4,4'-DDE | 72-55-9 | 9 | | | 0.024 | J |
| 4,4'-DDT | 50-29-3 | 9 | | | 0.014 | R |
| Aldrin | 309-00-2 | 0.17 | | | | |
| alpha-BHC | 319-84-6 | | | | | |
| alpha-Chlordane | 5103-71-9 | | | | | |
| beta-BHC | 319-85-7 | | | | | |
| delta-BHC | 319-86-8 | | | | | |
| Dieldrin | 60-57-1 | 0.18 | | | | |
| Endosulfan I | 959-98-8 | | | | | |
| Endosulfan II | 33213-65-9 | | | | | |
| Endosulfan sulfate | 1031-07-8 | | | | | |
| Endrin | 72-20-8 | 310 | | | | |
| Endrin aldehyde | 7421-93-4 | | | | | |
| Endrin ketone | 53494-70-5 | | | | | |
| gamma-BHC (Lindane) | 58-89-9 | | | | | |
| gamma-Chlordane | 5103-74-2 | | | | | |
| Heptachlor | 76-44-8 | 0.65 | | | | |
| Heptachlor epoxide | 1024-57-3 | | | | | |
| Methoxychlor | 72-43-5 | 5200 | | | | |
| Toxaphene | 8001-35-2 | 0.2 | | | | |

Notes

J - estimated

JN - presumptive evidence for the presence of the material at an

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ft bgs - feet below ground surface

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TABLE 7
SUMMARY OF PESTICIDES DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP1-1 | | TP1-2 | | TP1-3 | | TP2-1 | | TP2-2 | |
|--------------------------|-----------|---------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Test Pit ID | | | 1 | | 1 | | 1 | | 2 | | 2 | |
| Sample Interval (ft bgs) | | | 4 | | 8 | | 10 | | 4 | | 8 | |
| Laboratory Sample ID | | | B0AA0 | | B0AA1 | | B0AA2 | | B0AA3 | | B0AA4 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | | 42187 | |
| SDG No. | | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | | | | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | |
| Sample Collection Date | | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | |
| Sample Collection Time | | | 11:00 | | 11:20 | | 11:45 | | 12:25 | | 12:45 | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | | 15 | | 13 | | 15 | | 18 | | 18 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag |
| 2,4,5-T | 93-76-5 | -- | | | | | | | | | | |
| 2,4,5-TP (Silvex) | 93-72-1 | -- | | | | | | | | | | |
| 2,4-D | 94-75-7 | -- | | | | | | | | | | |
| 2,4-DB | 94-82-6 | -- | | | | | | | | | | |
| Dalapon | 75-99-0 | -- | | | | | | | | | | |
| Dicamba | 1918-00-9 | -- | | | | | | | | | | |
| Dichloroprop | 120-36-5 | -- | | | | | | | | | | |
| Dinoseb | 88-85-7 | -- | | | | | | | | | | |
| MCPA | 94-74-6 | -- | | | | | | | | | | |
| MCPP | 93-65-2 | -- | | | | | | | | | | |
| Pentachlorophenol | 87-86-5 | 24 | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | -- | | | | | | | | | | |

Notes

J - estimated

JN - presumptive evidence for the presence of the material at an estimated value

R - rejected (unusable)

SDG - Sample Delivery Group

ft bgs - feet below ground surface

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TABLE 7
SUMMARY OF PESTICIDES DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP2-3 | | TP3-1 | | TP3-2 | | TP3-3 | | TP4-1 | |
|--------------------------|-----------|---------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Test Pit ID | | | 2 | | 3 | | 3 | | 3 | | 4 | |
| Sample Interval (ft bgs) | | | 10 | | 4 | | 8 | | 10 | | 4 | |
| Laboratory Sample ID | | | B0AA5 | | B0AA6 | | B0AA7 | | B0AA8 | | B0AA9 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | | 42187 | |
| SDG No. | | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | | | | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | |
| Sample Collection Date | | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/26/2012 | |
| Sample Collection Time | | | 13:00 | | 15:00 | | 15:15 | | 15:30 | | 9:15 | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | | 22 | | 18 | | 13 | | 13 | | 11 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag |
| 2,4,5-T | 93-76-5 | -- | | | | | | | | | | |
| 2,4,5-TP (Silvex) | 93-72-1 | -- | | | | | | | | | | |
| 2,4-D | 94-75-7 | -- | | | | | | | | | | |
| 2,4-DB | 94-82-6 | -- | | | | | | | | | | |
| Dalapon | 75-99-0 | -- | | | | | | | | | | |
| Dicamba | 1918-00-9 | -- | | | | | | | | | | |
| Dichloroprop | 120-36-5 | -- | | | 0.075 | J | 0.092 | J | 0.055 | NJ | 0.15 | R |
| Dinoseb | 88-85-7 | -- | | | | | | | | | | |
| MCPA | 94-74-6 | -- | | | | | | | | | | |
| MCPP | 93-65-2 | -- | | | | | | | | | | |
| Pentachlorophenol | 87-86-5 | 24 | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | -- | | | | | | | | | | |

Notes

J - estimated

JN - presumptive evidence for the presence of the mate

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SUMMARY OF PESTICIDES DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP4-2 | | TP4-3 | | TP5-1 | | TP5-2 | | TP5-3 | |
|--------------------------|-----------|---------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Test Pit ID | | | 4 | | 4 | | 5 | | 5 | | 5 | |
| Sample Interval (ft bgs) | | | 8 | | 10 | | 4 | | 8 | | 10 | |
| Laboratory Sample ID | | | B0AB0 | | B0AB1 | | B0AB2 | | B0AB3 | | B0AB4 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | | 42187 | |
| SDG No. | | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | | | | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | |
| Sample Collection Date | | | 1/26/2012 | | 1/26/2012 | | 1/26/2012 | | 1/26/2012 | | 1/27/2012 | |
| Sample Collection Time | | | 9:30 | | 9:45 | | 10:30 | | 10:30 | | 10:15 | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | | 17 | | 13 | | 12 | | 13 | | 14 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag |
| 2,4,5-T | 93-76-5 | -- | | | | | | | | | | |
| 2,4,5-TP (Silvex) | 93-72-1 | -- | | | | | | | | | | |
| 2,4-D | 94-75-7 | -- | | | | | | | | | | |
| 2,4-DB | 94-82-6 | -- | | | | | | | | | | |
| Dalapon | 75-99-0 | -- | | | | | | | | | | |
| Dicamba | 1918-00-9 | -- | | | | | | | | | | |
| Dichloroprop | 120-36-5 | -- | 0.13 | NJ | 0.089 | J | | | | | 0.16 | R |
| Dinoseb | 88-85-7 | -- | | | | | | | | | | |
| MCPA | 94-74-6 | -- | | | | | | | | | | |
| MCPP | 93-65-2 | -- | | | | | | | | | | |
| Pentachlorophenol | 87-86-5 | 24 | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | -- | | | | | | | | | | |

Notes

J - estimated

JN - presumptive evidence for the presence of the mate

R - rejected (unusable)

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RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP6-1 | | TP6-2 | | TP6-3 | | TP7-1 | | TP7-2 | |
|--------------------------|-----------|---------|---------------|------|----------------|------|---------------|------|---------------|------|----------------|------|
| Test Pit ID | | | 6 | | 6 | | 6 | | 6 | | 6 | |
| Sample Interval (ft bgs) | | | 4 | | 8 | | 10 | | 4 | | 8 | |
| Laboratory Sample ID | | | B0AB5 | | B0AB6 | | B0AB7 | | B0AB8 | | B0AB9 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | | 42187 | |
| SDG No. | | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | Dupl. of TP7-2 | | | | | | Dupl. of TP6-2 | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | | CLP SOW Pest | |
| Sample Collection Date | | | 1/27/2012 | | 1/27/2012 | | 1/27/2012 | | 1/27/2012 | | 1/27/2012 | |
| Sample Collection Time | | | 10:50 | | 11:45 | | 12:15 | | 12:45 | | 13:00 (11:45) | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | | 20 | | 15 | | 15 | | 18 | | 16 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| 2,4,5-T | 93-76-5 | -- | | | | | | | | | | |
| 2,4,5-TP (Silvex) | 93-72-1 | -- | | | | | | | | | | |
| 2,4-D | 94-75-7 | -- | | | | | | | | | | |
| 2,4-DB | 94-82-6 | -- | | | | | | | | | | |
| Dalapon | 75-99-0 | -- | | | | | | | | | | |
| Dicamba | 1918-00-9 | -- | | | | | | | | | | |
| Dichloroprop | 120-36-5 | -- | 0.12 | NJ | 0.11 | NJ | 0.095 | J | | | | |
| Dinoseb | 88-85-7 | -- | | | | | | | | | | |
| MCPA | 94-74-6 | -- | | | | | | | | | | |
| MCPP | 93-65-2 | -- | | | | | | | | | | |
| Pentachlorophenol | 87-86-5 | 24 | | | | | | | | | | |
| 4-Nitrophenol | 100-02-7 | -- | | | | | | | | | | |

Notes

J - estimated

JN - presumptive evidence for the presence of the mate

R - rejected (unusable)

SDG - Sample Delivery Group

ft bgs - feet below ground surface

CLP SOW - Contract Laboratory Program Statement of V

Pest - Pesticides

NRDCSCC - NJ Non-Residential Direct Contact Soil Clean

mg/kg = milligrams per kilogram

TP - test pit

TABLE 8
SUMMARY OF PCBs DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP1-1 | | TP1-2 | | TP1-3 | | TP2-1 | |
|--------------------------|------------|---------|---------------|------|---------------|------|---------------|------|---------------|------|
| Test Pit ID | | | 1 | | 1 | | 1 | | 2 | |
| Sample Interval (ft bgs) | | | 4 | | 8 | | 10 | | 4 | |
| Laboratory Sample ID | | | B0AA0 | | B0AA1 | | B0AA2 | | B0AA3 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | |
| SDG No. | | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW PCBs | | CLP SOW PCBs | | CLP SOW PCBs | | CLP SOW PCBs | |
| Sample Collection Date | | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | |
| Sample Collection Time | | | 11:00 | | 11:20 | | 11:45 | | 12:25 | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | | 17 | | 15 | | 16 | | 19 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Aroclor-1016 | 12674-11-2 | -- | | | | | | | | |
| Aroclor-1221 | 11104-28-2 | -- | | | | | | | | |
| Aroclor-1232 | 11141-16-5 | -- | | | | | | | | |
| Aroclor-1242 | 53469-21-9 | -- | | | | | | | | |
| Aroclor-1254 | 11097-69-1 | -- | | | 0.13 | | 0.1 | | 0.067 | |
| Aroclor-1260 | 11096-82-5 | -- | | | | | | | | |
| Aroclor-1262 | 37324-23-5 | -- | | | | | | | | |
| Aroclor-1268 | 11100-14-4 | -- | | | | | | | | |

Notes

J - estimated

SDG - Sample Delivery Group

ft bgs - feet below ground surface

CLP SOW - Contract Laboratory Program Statement of Work

PCBs - Polychlorinated biphenyls

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Criteria

mg/kg = milligrams per kilogram

TP - test pit

TABLE 8
SUMMARY OF PCBs DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP2-2 | | TP2-3 | | TP3-1 | | TP3-2 | |
|--------------------------|------------|---------|---------------|------|---------------|------|---------------|------|---------------|------|
| Test Pit ID | | | 2 | | 2 | | 3 | | 3 | |
| Sample Interval (ft bgs) | | | 8 | | 10 | | 4 | | 8 | |
| Laboratory Sample ID | | | B0AA4 | | B0AA5 | | B0AA6 | | B0AA7 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | |
| SDG No. | | | B0AA1 | | B0AA1 | | B0AA1 | | B0AA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW PCBs | | CLP SOW PCBs | | CLP SOW PCBs | | CLP SOW PCBs | |
| Sample Collection Date | | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | |
| Sample Collection Time | | | 12:45 | | 13:00 | | 15:00 | | 15:15 | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | | 18 | | 20 | | 16 | | 15 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Aroclor-1016 | 12674-11-2 | -- | | | | | | | | |
| Aroclor-1221 | 11104-28-2 | -- | | | | | | | | |
| Aroclor-1232 | 11141-16-5 | -- | | | | | | | | |
| Aroclor-1242 | 53469-21-9 | -- | | | | | | | | |
| Aroclor-1254 | 11097-69-1 | -- | 0.27 | | 0.068 | | | | | |
| Aroclor-1260 | 11096-82-5 | -- | | | | | | | | |
| Aroclor-1262 | 37324-23-5 | -- | | | | | | | | |
| Aroclor-1268 | 11100-14-4 | -- | | | | | | | | |

Notes

J - estimated

SDG - Sample Delivery Group

ft bgs - feet below ground surface

CLP SOW - Contract Laboratory Program Statement of Work

PCBs - Polychlorinated biphenyls

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Cri

mg/kg = milligrams per kilogram

TP - test pit

TABLE 8
SUMMARY OF PCBs DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP3-3 | | TP4-1 | | TP4-2 | | TP4-3 | |
|--------------------------|------------|---------|---------------|------|---------------|------|---------------|------|---------------|------|
| Test Pit ID | | | 3 | | 4 | | 4 | | 4 | |
| Sample Interval (ft bgs) | | | 10 | | 4 | | 8 | | 10 | |
| Laboratory Sample ID | | | BOAA8 | | BOAA9 | | BOAB0 | | BOAB1 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | |
| SDG No. | | | BOAA1 | | BOAA1 | | BOAA1 | | BOAA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW PCBs | | CLP SOW PCBs | | CLP SOW PCBs | | CLP SOW PCBs | |
| Sample Collection Date | | | 1/25/2012 | | 1/26/2012 | | 1/26/2012 | | 1/26/2012 | |
| Sample Collection Time | | | 15:30 | | 9:15 | | 9:30 | | 9:45 | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | | 13 | | 12 | | 18 | | 16 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Aroclor-1016 | 12674-11-2 | -- | | | | | | | | |
| Aroclor-1221 | 11104-28-2 | -- | | | | | | | | |
| Aroclor-1232 | 11141-16-5 | -- | | | | | | | | |
| Aroclor-1242 | 53469-21-9 | -- | | | | | | | | |
| Aroclor-1254 | 11097-69-1 | -- | | | 0.03 | J | | | | |
| Aroclor-1260 | 11096-82-5 | -- | | | | | | | | |
| Aroclor-1262 | 37324-23-5 | -- | | | | | | | | |
| Aroclor-1268 | 11100-14-4 | -- | | | | | | | | |

Notes

J - estimated

SDG - Sample Delivery Group

ft bgs - feet below ground surface

CLP SOW - Contract Laboratory Program Statement of Work

PCBs - Polychlorinated biphenyls

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Cri

mg/kg = milligrams per kilogram

TP - test pit

TABLE 8
SUMMARY OF PCBs DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP5-1 | | TP5-2 | | TP5-3 | | TP6-1 | |
|--------------------------|------------|---------|---------------|------|---------------|------|---------------|------|----------------|------|
| Test Pit ID | | | 5 | | 5 | | 5 | | 6 | |
| Sample Interval (ft bgs) | | | 4 | | 8 | | 10 | | 4 | |
| Laboratory Sample ID | | | BOAB2 | | BOAB3 | | BOAB4 | | BOAB5 | |
| Case No. | | | 42187 | | 42187 | | 42187 | | 42187 | |
| SDG No. | | | BOAA1 | | BOAA1 | | BOAA1 | | BOAA1 | |
| Matrix | | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | Dupl. of TP7-1 | |
| Laboratory | | | A4 Scientific | | A4 Scientific | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW PCBs | | CLP SOW PCBs | | CLP SOW PCBs | | CLP SOW PCBs | |
| Sample Collection Date | | | 1/26/2012 | | 1/26/2012 | | 1/27/2012 | | 1/27/2012 | |
| Sample Collection Time | | | 10:30 | | 10:30 | | 10:15 | | 10:50 | |
| Dilution | | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | | 12 | | 11 | | 15 | | 27 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Aroclor-1016 | 12674-11-2 | -- | | | | | | | | |
| Aroclor-1221 | 11104-28-2 | -- | | | | | | | | |
| Aroclor-1232 | 11141-16-5 | -- | | | | | | | | |
| Aroclor-1242 | 53469-21-9 | -- | | | | | | | | |
| Aroclor-1254 | 11097-69-1 | -- | | | | | | | | |
| Aroclor-1260 | 11096-82-5 | -- | | | | | | | | |
| Aroclor-1262 | 37324-23-5 | -- | | | | | | | | |
| Aroclor-1268 | 11100-14-4 | -- | | | | | | | | |

Notes

J - estimated

SDG - Sample Delivery Group

ft bgs - feet below ground surface

CLP SOW - Contract Laboratory Program Statement of Work

PCBs - Polychlorinated biphenyls

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Cri

mg/kg = milligrams per kilogram

TP - test pit

TABLE 8
SUMMARY OF PCBs DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP6-1 MS | | TP6-1 MSD | | TP6-2 | | TP6-3 | |
|--------------------------|------------|---------|----------|------|-----------|------|----------------|------|---------------|------|
| Test Pit ID | | | | | | | 6 | | 6 | |
| Sample Interval (ft bgs) | | | | | | | 8 | | 10 | |
| Laboratory Sample ID | | | B0AB5MS | | B0AB5MSD | | B0AB6 | | B0AB7 | |
| Case No. | | | | | | | 42187 | | 42187 | |
| SDG No. | | | | | | | B0AA1 | | B0AA1 | |
| Matrix | | | | | | | Soil | | Soil | |
| Field QC | | | | | | | Dupl. of TP7-2 | | | |
| Laboratory | | | | | | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | | | | | CLP SOW PCBs | | CLP SOW PCBs | |
| Sample Collection Date | | | | | | | 1/27/2012 | | 1/27/2012 | |
| Sample Collection Time | | | | | | | 11:45 | | 12:15 | |
| Dilution | | | | | | | 1 | | 1 | |
| % Moisture | | | | | | | 14 | | 16 | |
| Units | | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Aroclor-1016 | 12674-11-2 | -- | 0.18 | J | 0.22 | J | | | | |
| Aroclor-1221 | 11104-28-2 | -- | | | | | | | | |
| Aroclor-1232 | 11141-16-5 | -- | | | | | | | | |
| Aroclor-1242 | 53469-21-9 | -- | | | | | | | | |
| Aroclor-1254 | 11097-69-1 | -- | | | | | | | | |
| Aroclor-1260 | 11096-82-5 | -- | 0.59 | J | | | 0.86 | J | | |
| Aroclor-1262 | 37324-23-5 | -- | | | | | | | | |
| Aroclor-1268 | 11100-14-4 | -- | | | | | | | | |

Notes

J - estimated

SDG - Sample Delivery Group

ft bgs - feet below ground surface

CLP SOW - Contract Laboratory Program Statement of Work

PCBs - Polychlorinated biphenyls

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Cri

mg/kg = milligrams per kilogram

TP - test pit

TABLE 8
SUMMARY OF PCBs DETECTED IN TEST PIT SOIL SAMPLES
RIVERSIDE AVENUE SITE
NEWARK, NJ

| Tetra Tech Sample ID | | | TP7-1 | | TP7-2 | |
|--------------------------|------------|---------|----------------|------|----------------|------|
| Test Pit ID | | | 6 | | 6 | |
| Sample Interval (ft bgs) | | | 4 | | 8 | |
| Laboratory Sample ID | | | B0AB8 | | B0AB9 | |
| Case No. | | | 42187 | | 42187 | |
| SDG No. | | | B0AA1 | | B0AA1 | |
| Matrix | | | Soil | | Soil | |
| Field QC | | | Dupl. of TP6-1 | | Dupl. of TP6-2 | |
| Laboratory | | | A4 Scientific | | A4 Scientific | |
| Analytical Method | | | CLP SOW PCBs | | CLP SOW PCBs | |
| Sample Collection Date | | | 1/27/2012 | | 1/27/2012 | |
| Sample Collection Time | | | 12:45 | | 13:00 (11:45) | |
| Dilution | | | 1 | | 1 | |
| % Moisture | | | 17 | | 17 | |
| Units | | | mg/kg | | mg/kg | |
| Compound | CAS RN | NRDCSCC | Result | Flag | Result | Flag |
| Aroclor-1016 | 12674-11-2 | -- | | | | |
| Aroclor-1221 | 11104-28-2 | -- | | | | |
| Aroclor-1232 | 11141-16-5 | -- | | | | |
| Aroclor-1242 | 53469-21-9 | -- | | | | |
| Aroclor-1254 | 11097-69-1 | -- | 0.35 | | 0.1 | J |
| Aroclor-1260 | 11096-82-5 | -- | | | | |
| Aroclor-1262 | 37324-23-5 | -- | | | | |
| Aroclor-1268 | 11100-14-4 | -- | | | | |

Notes

J - estimated

SDG - Sample Delivery Group

ft bgs - feet below ground surface

CLP SOW - Contract Laboratory Program Statement of Work

PCBs - Polychlorinated biphenyls

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Cri

mg/kg = milligrams per kilogram

TP - test pit

| Tetra Tech Sample ID | TP2-2 | | TP3-2 | | TP5-2 | | TP6-2 | | TP7-2 | |
|------------------------|----------------|------|----------------|------|----------------|------|----------------|------|----------------|------|
| Laboratory Sample ID | 6534429 | | 6534430 | | 6534431 | | 6534432 | | 6534433 | |
| Field QC | | | | | | | Dupl. of TP7-2 | | Dupl. of TP6-2 | |
| Laboratory | Lancaster Labs | |
| Analytical Method | SW846 8290A | |
| Sample Collection Date | 1/25/2012 | | 1/25/2012 | | 1/26/2012 | | 1/27/2012 | | 1/27/2012 | |
| Sample Collection Time | 12:45 | | 15:15 | | 10:30 | | 11:45 | | 13:00 (11:45) | |
| Dilution | 1 | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | 17.9 | | 15.6 | | 18.5 | | 15.2 | | 19.7 | |
| Units | ng/kg | |
| Compound | Result | Flag |
| 2378-TCDD | < 1.20 | | < 1.17 | | < 1.23 | | 1.65 | B | < 1.23 | |
| 12378-PeCDD | < 6.00 | | < 5.83 | | < 6.13 | | < 5.88 | | < 6.15 | |
| 123478-HxCDD | < 6.00 | | < 5.83 | | < 6.13 | | < 5.88 | | < 6.15 | |
| 123678-HxCDD | < 6.00 | | < 5.83 | | < 6.13 | | 5.91 | B | < 6.15 | |
| 123789-HxCDD | < 6.00 | | < 5.83 | | < 6.13 | | < 5.88 | | < 6.15 | |
| 1234678-HpCDD | 21.6 | B | 26.5 | B | 49.8 | B | 59.9 | B | 50.2 | B |
| OCDD | 1,450 | B | 2,760 | B | 1,870 | B | 1,710 | B | 2,390 | B |
| 2378-TCDF | < 1.20 | | < 1.17 | | < 1.23 | | < 1.18 | | n.a. | |
| 2378-TCDF-Conf | n.a. | | n.a. | | n.a. | | n.a. | | < 1.23 | |
| 12378-PeCDF | < 6.00 | | < 5.83 | | < 6.13 | | < 5.88 | | < 6.15 | |
| 23478-PeCDF | < 6.00 | | < 5.83 | | < 6.13 | | < 5.88 | | < 6.15 | |
| 123478-HxCDF | < 6.00 | | < 5.83 | | < 6.13 | | < 5.88 | | < 6.15 | |
| 123678-HxCDF | < 6.00 | | < 5.83 | | < 6.13 | | < 5.88 | | < 6.15 | |
| 123789-HxCDF | < 6.00 | | < 5.83 | | < 6.13 | | < 5.88 | | < 6.15 | |
| 234678-HxCDF | < 6.00 | | < 5.83 | | < 6.13 | | < 5.88 | | < 6.15 | |
| 1234678-HpCDF | 9.17 | B | 10.0 | B | 22.9 | B | 26.3 | B | 26.7 | B |
| 1234789-HpCDF | < 6.00 | | < 5.83 | | < 6.13 | | < 5.88 | | < 6.15 | |
| OCDF | 22.6 | B | 28.5 | B | 110 | B | 57.4 | B | 56.5 | B |
| Total TCDD | 2.66 | QB | 3.15 | QB | 2.32 | QB | 13.1 | QB | 5.52 | QB |
| Total PeCDD | < 6.00 | | < 5.83 | | < 6.13 | | 25.7 | QB | 8.80 | QB |
| Total HxCDD | 11.2 | QB | 8.68 | QB | 10.1 | QB | 56.4 | QB | 26.3 | QB |
| Total HpCDD | 50.7 | B | 56.9 | QB | 90.6 | B | 117 | QB | 98.7 | B |
| Total TCDF | 11.7 | QB | 8.73 | QB | 4.00 | QB | 16.0 | QB | 18.1 | QB |
| Total PeCDF | 9.83 | QB | 7.54 | QB | < 6.13 | | 16.6 | QB | 17.8 | QB |
| Total HxCDF | 14.2 | QB | 12.1 | QB | 19.9 | QB | 29.7 | QB | 31.1 | QB |
| Total HpCDF | 24.6 | QB | 29.6 | QB | 94.6 | QB | 65.4 | QB | 67.9 | QB |

Notes

B =Detected in Method Blank

Q=EMPC - Estimated Maximum Possible Concentration

n.a. = not analyzed

ng/kg = nanograms per kilogram

| Tetra Tech Sample ID | | TP1-1 | | TP1-2 | | TP1-3 | | TP2-1 | |
|--------------------------|---------|----------------|------|----------------|------|----------------|------|----------------|------|
| Test Pit ID | | 1 | | 1 | | 1 | | 2 | |
| Sample Interval (ft bgs) | | 4 | | 8 | | 10 | | 4 | |
| Laboratory Sample ID | | MB0AA0 | | MB0AA1 | | MB0AA2 | | MB0AA3 | |
| Matrix | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | |
| Laboratory | | ALS Laboratory | | ALS Laboratory | | ALS Laboratory | | ALS Laboratory | |
| Analytical Method | | ICP - AES | | ICP - AES | | ICP - AES | | ICP - AES | |
| Sample Collection Date | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | |
| Sample Collection Time | | 11:00 | | 11:20 | | 11:45 | | 12:25 | |
| Dilution | | 1 | | 1 | | 1 | | 1 (Hg -20) | |
| % Moisture | | 17.5 | | 20.5 | | 20.9 | | 17.9 | |
| Units | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Analyte | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Aluminum | | 6250 | | 7410 | | 8190 | | 8060 | |
| Antimony | 340 | 0.43 | UJ | 0.39 | UJ | 6.8 | UJ | 7.3 | UJ |
| Arsenic | 20 | 6.7 | | 5.5 | | 6.4 | | 5.0 | |
| Barium | 47000 | 417 | | 784 | | 327 | | 2010 | |
| Beryllium | | 0.46 | U | 0.59 | U | 0.57 | U | 0.61 | U |
| Cadmium | 100 | 0.81 | | 2.3 | | 0.57 | U | 0.88 | |
| Calcium | | 6110 | | 4880 | | 6420 | | 3560 | |
| Chromium | | 24.2 | | 33.6 | | 17.5 | | 18.6 | |
| Cobalt | | 5.4 | | 5.9 | U | 6.0 | | 6.4 | |
| Copper | 600 | 55.6 | J | 42.7 | J | 154 | J | 69.7 | J |
| Iron | | 12900 | | 11400 | | 13600 | | 14300 | |
| Lead | 600 | 384 | | 405 | | 237 | | 179 | |
| Magnesium | | 1970 | | 1650 | | 1840 | | 2090 | |
| Manganese | | 298 | | 301 | | 265 | | 264 | |
| Mercury | 270 | 0.60 | | 0.79 | | 0.58 | | 28.2 | |
| Nickel | 2400 | 11.0 | | 10.0 | | 11.5 | | 13.1 | |
| Potassium | | 549 | | 597 | | 551 | U | 618 | |
| Selenium | 3100 | 3.2 | U | 0.41 | U | 4.0 | U | 4.3 | U |
| Silver | 4100 | 0.080 | U | 1.2 | U | 1.1 | U | 1.2 | U |
| Sodium | | 463 | U | 588 | U | 569 | U | 609 | U |
| Thallium | 2 | 2.3 | U | 2.9 | U | 2.8 | U | 3.0 | U |
| Vanadium | 7100 | 18.3 | | 18.2 | | 16.1 | | 16.8 | |
| Zinc | 1500 | 444 | | 752 | | 336 | | 2500 | |
| Cyanide | 21000 | 1.0 | | 0.26 | J | 0.30 | J | 0.45 | J |

Notes

J - estimated

U - not detected

ft bgs - feet below ground surface

ICP -AES - inductively coupled plasma atomic emission spectroscopy

NRDCSCC - NJ Non-Residential Direct Contact Soil Cleanup Criteria

mg/kg = milligrams per kilogram

TP - test pit

1880

Exceeds NJ NRDCSCC

| Tetra Tech Sample ID | | TP2-2 | | TP2-3 | | TP3-1 | | TP3-2 | |
|--------------------------|---------|----------------|------|----------------|------|----------------|------|----------------|------|
| Test Pit ID | | 2 | | 2 | | 3 | | 3 | |
| Sample Interval (ft bgs) | | 8 | | 10 | | 4 | | 8 | |
| Laboratory Sample ID | | MB0AA4 | | MB0AA5 | | MB0AA6 | | MB0AA7 | |
| Matrix | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | |
| Laboratory | | ALS Laboratory | | ALS Laboratory | | ALS Laboratory | | ALS Laboratory | |
| Analytical Method | | ICP - AES | | ICP - AES | | ICP - AES | | ICP - AES | |
| Sample Collection Date | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | | 1/25/2012 | |
| Sample Collection Time | | 12:45 | | 13:00 | | 15:00 | | 15:15 | |
| Dilution | | 1 | | 1 (Cn -5) | | 1 | | 1 | |
| % Moisture | | 20 | | 25.7 | | 14.9 | | 15.3 | |
| Units | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Analyte | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Aluminum | | 7240 | | 5750 | | 6150 | | 7480 | |
| Antimony | 340 | 0.26 | UJ | 7.5 | UJ | 5.8 | UJ | 5.5 | UJ |
| Arsenic | 20 | 10.1 | | 6.7 | | 6.5 | | 6.1 | |
| Barium | 47000 | 465 | | 238 | J | 287 | | 287 | |
| Beryllium | | 0.61 | U | 0.62 | U | 0.49 | U | 0.59 | |
| Cadmium | 100 | 1.0 | | 0.62 | U | 0.72 | | 0.55 | |
| Calcium | | 7350 | | 5190 | | 3560 | | 4770 | |
| Chromium | | 36.2 | | 15.7 | J | 21.6 | | 18.9 | |
| Cobalt | | 7.0 | | 6.2 | U | 5.1 | | 4.9 | |
| Copper | 600 | 66.8 | J | 48.6 | J | 52.7 | J | 36.1 | J |
| Iron | | 14600 | | 15000 | | 11800 | | 12800 | |
| Lead | 600 | 342 | | 390 | | 1880 | | 350 | |
| Magnesium | | 1710 | | 1450 | | 1440 | | 1750 | |
| Manganese | | 538 | | 487 | J | 225 | | 338 | |
| Mercury | 270 | 0.98 | | 2.3 | | 0.51 | | 0.56 | |
| Nickel | 2400 | 13.6 | | 10.1 | | 10.5 | | 10.5 | |
| Potassium | | 649 | | 537 | U | 535 | | 663 | |
| Selenium | 3100 | 0.61 | U | 0.38 | U | 0.41 | U | 3.2 | U |
| Silver | 4100 | 0.078 | U | 0.086 | U | 0.095 | U | 0.92 | U |
| Sodium | | 607 | U | 623 | U | 486 | U | 461 | U |
| Thallium | 2 | 3.0 | U | 3.1 | U | 2.4 | U | 2.3 | U |
| Vanadium | 7100 | 20.7 | | 14.9 | | 19.9 | | 15.6 | |
| Zinc | 1500 | 503 | | 231 | J | 318 | | 342 | |
| Cyanide | 21000 | 0.37 | J | 11.7 | | 0.21 | J | 0.34 | J |

Notes

J - estimated

U - not detected

ft bgs - feet below ground surface

ICP -AES - inductively coupled plasma a

NRDCSCC - NJ Non-Residential Direct C

mg/kg = milligrams per kilogram

TP - test pit

1880

Exceeds NJ NRD

| Tetra Tech Sample ID | | TP3-3 | | TP4-1 | | TP4-2 | | TP4-3 | |
|--------------------------|---------|----------------|------|----------------|------|----------------|------|----------------|------|
| Test Pit ID | | 3 | | 4 | | 4 | | 4 | |
| Sample Interval (ft bgs) | | 10 | | 4 | | 8 | | 10 | |
| Laboratory Sample ID | | MB0AA8 | | MB0AA9 | | MB0AB0 | | MB0AB1 | |
| Matrix | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | |
| Laboratory | | ALS Laboratory | | ALS Laboratory | | ALS Laboratory | | ALS Laboratory | |
| Analytical Method | | ICP - AES | | ICP - AES | | ICP - AES | | ICP - AES | |
| Sample Collection Date | | 1/25/2012 | | 1/26/2012 | | 1/26/2012 | | 1/26/2012 | |
| Sample Collection Time | | 15:30 | | 9:15 | | 9:30 | | 9:45 | |
| Dilution | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | 14.6 | | 12.7 | | 17.3 | | 15.8 | |
| Units | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Analyte | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Aluminum | | 7630 | | 9320 | | 7690 | | 7260 | |
| Antimony | 340 | 6.0 | UJ | 6.7 | UJ | 7.0 | UJ | 6.9 | UJ |
| Arsenic | 20 | 6.3 | | 4.5 | | 6.9 | | 5.4 | |
| Barium | 47000 | 271 | | 432 | | 293 | | 539 | |
| Beryllium | | 0.50 | U | 0.56 | U | 0.59 | U | 0.57 | U |
| Cadmium | 100 | 0.50 | U | 0.56 | U | 0.59 | U | 0.64 | |
| Calcium | | 4510 | | 2310 | | 3410 | | 4120 | |
| Chromium | | 23.0 | | 17.1 | | 15.7 | | 18.3 | |
| Cobalt | | 6.2 | | 6.4 | | 6.0 | | 5.7 | U |
| Copper | 600 | 31.2 | J | 43.2 | J | 60.9 | J | 61.5 | J |
| Iron | | 14100 | | 16600 | | 13300 | | 14900 | |
| Lead | 600 | 286 | | 166 | | 244 | | 290 | |
| Magnesium | | 1700 | | 2880 | | 2040 | | 2340 | |
| Manganese | | 374 | | 294 | | 350 | | 370 | |
| Mercury | 270 | 1.1 | | 0.93 | | 0.60 | | 0.64 | |
| Nickel | 2400 | 10.4 | | 14.5 | | 12.8 | | 13.9 | |
| Potassium | | 603 | | 991 | | 761 | J- | 656 | |
| Selenium | 3100 | 3.5 | U | 3.9 | U | 4.1 | U | 4.0 | U |
| Silver | 4100 | 1.0 | U | 1.1 | U | 1.2 | U | 1.1 | U |
| Sodium | | 500 | U | 556 | U | 587 | U | 571 | U |
| Thallium | 2 | 2.5 | U | 2.8 | U | 2.9 | U | 2.9 | U |
| Vanadium | 7100 | 13.9 | | 17.0 | | 16.5 | | 14.5 | |
| Zinc | 1500 | 338 | | 449 | | 347 | | 585 | |
| Cyanide | 21000 | 0.33 | J | 0.24 | | 0.27 | J | 0.29 | J |

Notes

J - estimated

U - not detected

ft bgs - feet below ground surface

ICP -AES - inductively coupled plasma a

NRDCSCC - NJ Non-Residential Direct C

mg/kg = milligrams per kilogram

TP - test pit

1880

Exceeds NJ NRD

| Tetra Tech Sample ID | | TP5-1 | | TP5-2 | | TP5-3 | | TP6-1 | |
|--------------------------|---------|----------------|------|----------------|------|----------------|------|----------------|------|
| Test Pit ID | | 5 | | 5 | | 5 | | 6 | |
| Sample Interval (ft bgs) | | 4 | | 8 | | 10 | | 4 | |
| Laboratory Sample ID | | MB0AB2 | | MB0AB3 | | MB0AB4 | | MB0AB5 | |
| Matrix | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | | | | | | | | |
| Laboratory | | ALS Laboratory | | ALS Laboratory | | ALS Laboratory | | ALS Laboratory | |
| Analytical Method | | ICP - AES | | ICP - AES | | ICP - AES | | ICP - AES | |
| Sample Collection Date | | 1/26/2012 | | 1/26/2012 | | 1/27/2012 | | 1/27/2012 | |
| Sample Collection Time | | 10:30 | | 10:30 | | 10:15 | | 10:50 | |
| Dilution | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | 12.3 | | 13.9 | | 13.7 | | 22.2 | |
| Units | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Analyte | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Aluminum | | 7270 | | 8000 | | 9650 | | 5140 | |
| Antimony | 340 | 6.6 | UJ | 6.8 | UJ | 5.2 | UJ | 0.49 | UJ |
| Arsenic | 20 | 4.7 | | 4.0 | | 4.5 | | 6.4 | |
| Barium | 47000 | 760 | | 185 | | 196 | | 313 | J |
| Beryllium | | 0.55 | U | 0.56 | U | 0.66 | | 0.60 | U |
| Cadmium | 100 | 0.83 | | 0.56 | U | 0.56 | | 1.1 | |
| Calcium | | 4230 | | 3280 | | 13500 | | 2890 | |
| Chromium | | 24.5 | | 14.0 | | 17.3 | | 37.5 | J |
| Cobalt | | 34.7 | | 8.8 | | 20.3 | | 9.8 | |
| Copper | 600 | 65.4 | J | 32.2 | J | 58.5 | J | 92.9 | J |
| Iron | | 12900 | | 13800 | | 16100 | | 13800 | |
| Lead | 600 | 900 | | 200 | | 444 | | 436 | |
| Magnesium | | 1910 | | 1960 | | 2520 | | 1250 | |
| Manganese | | 359 | | 319 | | 377 | | 213 | J |
| Mercury | 270 | 0.50 | | 0.30 | | 0.50 | | 0.83 | |
| Nickel | 2400 | 13.3 | | 11.2 | | 14.2 | | 13.2 | |
| Potassium | | 609 | | 783 | | 687 | | 556 | U |
| Selenium | 3100 | 3.8 | U | 3.9 | U | 3.0 | U | 0.77 | U |
| Silver | 4100 | 1.1 | U | 1.1 | U | 0.085 | U | 0.20 | U |
| Sodium | | 548 | U | 564 | U | 429 | U | 601 | U |
| Thallium | 2 | 2.7 | U | 2.8 | U | 2.1 | U | 3.0 | U |
| Vanadium | 7100 | 19.4 | | 14.8 | | 25.8 | | 23.3 | |
| Zinc | 1500 | 561 | | 204 | | 244 | | 518 | J |
| Cyanide | 21000 | 0.25 | J | 0.18 | J | 0.26 | J | 0.40 | J |

Notes

J - estimated

U - not detected

ft bgs - feet below ground surface

ICP -AES - inductively coupled plasma a

NRDCSCC - NJ Non-Residential Direct C

mg/kg = milligrams per kilogram

TP - test pit

1880

Exceeds NJ NRD

| Tetra Tech Sample ID | | TP6-2 | | TP6-3 | | TP7-1 | | TP7-2 | |
|--------------------------|---------|----------------|------|----------------|------|----------------|------|----------------|------|
| Test Pit ID | | 6 | | 6 | | 6 | | 6 | |
| Sample Interval (ft bgs) | | 8 | | 10 | | 4 | | 8 | |
| Laboratory Sample ID | | MB0AB6 | | MB0AB7 | | MB0AB8 | | MB0AB9 | |
| Matrix | | Soil | | Soil | | Soil | | Soil | |
| Field QC | | Dupl. of TP7-2 | | | | | | Dupl. of TP6-2 | |
| Laboratory | | ALS Laboratory | | ALS Laboratory | | ALS Laboratory | | ALS Laboratory | |
| Analytical Method | | ICP - AES | | ICP - AES | | ICP - AES | | ICP - AES | |
| Sample Collection Date | | 1/27/2012 | | 1/27/2012 | | 1/27/2012 | | 1/27/2012 | |
| Sample Collection Time | | 11:45 | | 12:15 | | 12:45 | | 13:00 (11:45) | |
| Dilution | | 1 | | 1 | | 1 | | 1 | |
| % Moisture | | 20 | | 25.4 | | 16.9 | | 23.9 | |
| Units | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Analyte | NRDCSCC | Result | Flag | Result | Flag | Result | Flag | Result | Flag |
| Aluminum | | 5580 | | 7050 | | 4660 | J | 8390 | J |
| Antimony | 340 | 5.9 | UJ | 8.0 | UJ | 6.0 | UJ | 0.27 | UJ |
| Arsenic | 20 | 5.4 | | 5.2 | | 5.6 | | 6.6 | |
| Barium | 47000 | 192 | J | 135 | | 288 | | 325 | |
| Beryllium | | 0.49 | U | 0.66 | U | 0.50 | U | 0.63 | U |
| Cadmium | 100 | 0.61 | | 0.66 | U | 0.83 | | 0.91 | |
| Calcium | | 2460 | | 2040 | | 6310 | J | 3950 | J |
| Chromium | | 22.8 | J | 261 | | 23.3 | | 29.1 | |
| Cobalt | | 8.8 | | 6.6 | U | 9.1 | | 11.2 | |
| Copper | 600 | 69.4 | J | 106 | J | 85.2 | J | 75.4 | J |
| Iron | | 13000 | | 13100 | | 11400 | | 14600 | |
| Lead | 600 | 381 | | 208 | | 289 | J | 483 | J |
| Magnesium | | 1510 | | 1690 | | 1670 | | 1940 | |
| Manganese | | 526 | J | 364 | | 181 | J | 261 | J |
| Mercury | 270 | 0.65 | | 0.44 | | 0.47 | | 0.53 | |
| Nickel | 2400 | 10.5 | | 10.7 | | 10.3 | | 12.8 | |
| Potassium | | 508 | | 664 | U | 501 | U | 723 | |
| Selenium | 3100 | 3.4 | U | 4.6 | U | 3.5 | U | 0.67 | J |
| Silver | 4100 | 0.11 | U | 0.11 | U | 1.0 | U | 1.3 | U |
| Sodium | | 492 | U | 664 | U | 501 | U | 626 | U |
| Thallium | 2 | 2.5 | U | 3.3 | U | 2.5 | U | 3.1 | U |
| Vanadium | 7100 | 16.4 | | 14.7 | | 13.9 | J | 26.9 | J |
| Zinc | 1500 | 310 | J | 248 | | 412 | | 393 | |
| Cyanide | 21000 | 0.18 | J | 0.15 | J | 0.33 | J | 0.47 | J |

Notes

J - estimated

U - not detected

ft bgs - feet below ground surface

ICP -AES - inductively coupled plasma a

NRDCSCC - NJ Non-Residential Direct C

mg/kg = milligrams per kilogram

TP - test pit

1880

Exceeds NJ NRD

APPENDIX C

PHOTOGRAPHIC DOCUMENTATION LOG

Photographic Documentation

Client: U.S. EPA Region 2
Site Name: Riverside Avenue
Location: Newark, New Jersey

Prepared by: Tetra Tech EM Inc.
Photographer: Kevin Scott, START Region 7
EPA Task Order No.: 9004L100178000

Photograph No. 001

Photograph Date: 1/25/12

Photograph Time: 10:38

Orientation: Facing west

Description: Photograph shows ERRS Foreman and Heavy Equipment Operator in vicinity of test pit TP1 location, at southwestern end of UST tank farm perimeter. Building #12 is in background.

**Photograph No. 002**

Photograph Date: 1/25/12

Photograph Time: 10:38

Orientation: Facing west

Description: Photograph shows pooled water in excavated area on Lot 64 in the area of the UST tank farm. One UST is visible in the photograph.



Photographic Documentation

Client: U.S. EPA Region 2
Site Name: Riverside Avenue
Location: Newark, New Jersey

Prepared by: Tetra Tech EM Inc.
Photographer: Kevin Scott, START Region 7
EPA Task Order No.: 9004L100178000

Photograph No. 003

Photograph Date: 1/25/12

Photograph Time: 10:56

Orientation: West

Description: Photograph shows ERRS operator excavating test pit TP1. ERRS Foreman is shown in foreground of photo with a tape measure to measure depth of excavation for sampling interval.

**Photograph No. 004**

Photograph Date: 1/25/12

Photograph Time: 11:03

Orientation: northwest

Description: Photograph shows soil in excavator bucket collected from a depth of 4' bgs in test pit TP1.



Photographic Documentation

Client: U.S. EPA Region 2
Site Name: Riverside Avenue
Location: Newark, New Jersey

Prepared by: Tetra Tech EM Inc.
Photographer: Kevin Scott, START Region 7
EPA Task Order No.: 9004L100178000

Photograph No. 005

Photograph Date: 1/25/12

Photograph Time: 12:14

Orientation: Facing northwest

Description: Photograph shows ERRS crew starting to excavate test pit TP2.



Photograph No. 006

Photograph Date: 1/25/12

Photograph Time: 12:16

Orientation: Facing southeast

Description: Photograph shows START sample staging location outside of the UST tank farm perimeter fence line.



Photographic Documentation

Client: U.S. EPA Region 2
Site Name: Riverside Avenue
Location: Newark, New Jersey

Prepared by: Tetra Tech EM Inc.
Photographer: Kevin Scott, START Region 7
EPA Task Order No.: 9004L100178000

Photograph No. 007

Photograph Date: 1/25/12

Photograph Time: 12:18

Orientation: North

Description: Photograph shows initial excavation of test pit TP2.



Photograph No. 008

Photograph Date: 1/25/12

Photograph Time: 12:18

Orientation: Facing east

Description: Photograph shows soil in excavator bucket collected from a depth of 4' bgs in test pit TP2.



Photographic Documentation

Client: U.S. EPA Region 2
Site Name: Riverside Avenue
Location: Newark, New Jersey

Prepared by: Tetra Tech EM Inc.
Photographer: Kevin Scott, START Region 7
EPA Task Order No.: 9004L100178000

Photograph No. 009

Photograph Date: 1/25/12

Photograph Time: 12:22

Orientation: Facing west

Description: Photograph shows soil sample collected from TP2 and PID used to screen soil samples for volatile organic compounds.



Photograph No. 010

Photograph Date: 1/25/12

Photograph Time: 15:23

Orientation: Facing northwest

Description: Looking down into test pit TP3. Excavation depth is approximately 8' bgs. Excavation is below water table (approx. 6' bgs). Black oily sheen is also visible in photo, floating on pooled water in excavation.



Photographic Documentation

Client: U.S. EPA Region 2
Site Name: Riverside Avenue
Location: Newark, New Jersey

Prepared by: Tetra Tech EM Inc.
Photographer: Kevin Scott, START Region 7
EPA Task Order No.: 9004L100178000

Photograph No. 011

Photograph Date: 1/26/12

Photograph Time: 09:09

Orientation: Facing west

Description: Photos shows ERRS foreman measuring depth of excavation in test pit TP4.



Photograph No. 012

Photograph Date: 1/26/12

Photograph Time: 10:15

Orientation: Facing north/northwest

Description: Photograph shows initial excavation of test pit TP5.



Photographic Documentation

Client: U.S. EPA Region 2
Site Name: Riverside Avenue
Location: Newark, New Jersey

Prepared by: Tetra Tech EM Inc.
Photographer: Kevin Scott, START Region 7
EPA Task Order No.: 9004L100178000

Photograph No. 013

Photograph Date: 1/26/12

Photograph Time: 10:26

Orientation: Facing south

Description: Looking down into test pit TP5. Excavation depth is approximately 5' bgs. Black oily sheen is also visible in photo, floating on pooled water in excavation.

**Photograph No. 014**

Photograph Date: 1/26/12

Photograph Time: 10:26

Orientation: Facing south

Description: Photograph shows soil in excavator bucket collected from a depth of 8' bgs in test pit TP5.



Photographic Documentation

Client: U.S. EPA Region 2
Site Name: Riverside Avenue
Location: Newark, New Jersey

Prepared by: Tetra Tech EM Inc.
Photographer: Kevin Scott, START Region 7
EPA Task Order No.: 9004L100178000

Photograph No. 015

Photograph Date: 1/26/12

Photograph Time: 10:51

Orientation: Facing southwest

Description: Photograph shows test pit TP5 overflowing with water after 8 inch water main was damaged by the excavator bucket while attempting to excavate to 10' bgs. ERSS personnel quickly constructed an earthen berm to and swale to channel water into open pit.

**Photograph No. 016**

Photograph Date: 1/26/12

Photograph Time: 10:38

Orientation: Facing east

Description: Photograph shows the 8 inch water main that was damaged in test pit TP5, after the main had been turned off and the water pumped out of the excavation.



Photographic Documentation

Client: U.S. EPA Region 2
Site Name: Riverside Avenue
Location: Newark, New Jersey

Prepared by: Tetra Tech EM Inc.
Photographer: Kevin Scott, START Region 7
EPA Task Order No.: 9004L100178000

Photograph No. 017

Photograph Date: 1/27/12

Photograph Time: 11:35

Orientation: Facing east

Description: Photograph of test pit TP6.



APPENDIX D

FIELD LOGBOOK NOTES



CONTENTS

PAGE

DATE

REFERENCE

Name KEVIN Scott
Address Tetra Tech
240 Continental Dr, Ste 200
Newark, DE 19701
Phone 302. 283 2248

Project Riverside Ave.
29 Riverside Ave
Newark NJ

Clear Vinyl Protective Slipcovers (Item No. 30) are available for this style of notebook.
Helps protect your notebook from wear & tear. Contact your dealer or the J.L. Darling Corporation

- 1/24/12
0700 Kevin Scott (K.S.) of Tetra Tech (TT) departs home (thoroughfare, NJ) + travels to Avis Rental Car (Dover, NJ) to pick up 'Bentel' Vehicle for Riverside Ave Project. (SUV) _____
- 0730 K.S. departs Bentel w/ rental vehicle + travels to TT Equipment Storage Unit in Newark, DE. _____
- 0815 K.S arrives at TT storage unit + loads rental vehicle w/ equipment + supplies needed for Riverside Ave stamp line project.
- 0845 K.S departs TT storage & unit in Newark, DE + departs to 5th Riverside Ave. _____
- 0915 K.S receives call from Adly Michael regarding Analytical Seawest Farm submitted by K.S. on 1/23/12.

- 1/24/12 (cont.)
1000 K.S. contacts EPA 05 C. Eric Daly (E.D.) regarding phone conversation w/ Adly Michael. + gave E.D. ETA.
1130 K.S. arrives on site Weather: Sunny temps in low 50's. _____
- K.S., E.D. + Kevin EPA's Foreman (Kenron) discuss plan for test transects + sampling. _____
- 1200 K.S sets up computer in EPA trailer + checks owner's and updates A.R.C + QAPP and assists D.D. w/ down data conversations. _____
- 1230 All personnel / offsite _____

Boat in the Rain

C. Scott 1/24/12

- 1/25/12
 0715 K.S. departs hotel / Combat
 Inn, McCarter Blvd., Newark,
 NJ) + travels to
 Staples + picks up sampling
 office supplies.
 0745 Staples not open until
 0800. K.S. heads to site
 in. K.S. arrives at site signs
 connect to network printer
 in EPA command post
 in order to print F2L labels
 + Chain - off - east by
 records. K.S.
- 0810 K.S. calls Aldy Michaels (509)
 to check on status of lab
 assignment. (A.M. informs
 K.S. that lab assignment
 should be in by late morning
 K.S. travels to Staples to
 purchase sample bags, bubble
 wrap + batteries + then to
 K Mart to purchase coolers
- 0930 K.S.
- 0945 K.S.

| | 1/25/12 (cont.) |
|------|--|
| 1030 | K.S. returns to 516 W/ item purchased from Staples + mart + speaks w/ ERKs. Fore more about beginning excavation test pits. |
| | ERKs operator (Sear) begins excavating on SW wall of open pit (just rare) |
| | Test pit 1/ |
| 1040 | K.S. takes photographs of test pit, excavata + conducts air monitoring with PAS systems near PAC 200 p I.D. strong odor of petroleum and visible sheen on surface of pooled water in open pit. Readings on P1D are elevated above background ERKs operator (215) excavated to a depth of 4 ft bags in TP 1 |
| | ✓ Staff 1/25/12 return |

1/25/12 (cont.)
 1100 K.S. collects sample of dark oil-stained dirt from 21.5' Excavator bucket + transfers it into a disposable aluminum bucketting pan, lake
 City: K.S. first took 3 VOA samplers using 3 Shovels @ 5 shovels from inside the Excavator bucket.
 K.S. also took additional photo + conducted air monitoring above the soil / in the 21.5' bucket. P.D. readings exceeded 100 ppm
 K.S. took soil / sample to staging area set up outside the Perimeter of the test tank firm + filled both the were for the following Analytical parameters: SOC (1.802 jar) moisture (one 0.02 jar) Pesticides (one 8-02 jar) + herbicides (one 8-02 jar).
 K. Scott 1/25/12

| | |
|------|---|
| 1115 | ERRS operator continues excavating 1-70' to ~ depth of approx. 8' below ground surface (bgs) TPI-2 |
| 1120 | K.S. collects samples TPI-2 (same containers + analytical tool parameters as TPI-1, K.S. photos Soil in bucket from TPI @ 8' depth and conducts air monitoring above Soil in 21.5' bucket P.D. readings exceed 100 ppm (P.D. in dozalog mode - K.S. to download data later) |
| 1140 | ERRS operator continues to excavate TPI to depth of 8' to bgs |
| 1145 | K.S. collects samples TPI-3 (same containers + determinations as for TPI-1 & TPI-2) |
| | 1/25/12 Beta in the bin. |

- River side (TP2)
1/25/12 (cont.)
- 1215 ERSS operator repositions
215 Excavator to begin
excavating test pit #2
(TP2). TP2 is on
west side of tank farm
perimeter.
- 1225 K5 collects soil sample
TP2-1 from bucket of
excavator
(Same sample containers and
parameters as for TP1.)
- 1240 ERSS operator continues
excavating TP2 to depth
of approx 6' bgs.
K5 collects sample TP2-2
(Same containers + analytical
parameters as ~~TP1~~
TP1 + TP2-1 plus an
extra 2 oz jar was filled
for dioxin/furan analysis
(plus a 2 oz moisture sample.)

| River side (TP2) | 1/25/12 (cont.) |
|---|---|
| 1200 ERSS operator continues its carving TP2 to depth of approx 6' bgs. | K5 collects sample TP2-3 same containers + analytical parameters as TP1 + TP2-1. |
| 1300 | ERSS operator continues to excavate deeper in TP2 to determine the depth of clay layer. Clay layer observed at depth of approx. 11' bgs. Water table at approx 6' bgs 6' down or less at approx 8' bgs. |
| 1330 | ERSS break for lunch K5 up恬les forms 2 little with sample date, + finer for samples collected so far. Also enter CHS # + lab info in to F2L. |

✓ 5:00 PM
1/25/12

Afternoon rain

- 1/25/12 (cont.)
- 1445 ERS operator begins excavating Test Pit #3 (T.P.3) North west side of UST tank farm per notes. Temperture: approx 45°F less windy than morning (approx. 8 mph from NW). K5 collects sample from bucket T.P.3 at depth of 4' bgs (TP3-1). Stone containers + parameters as TP1. (no sample collected for doxin at this depth. K5 photographs test pit and material in excavator bucket and conducts air monitoring with PI). Elevated PI's readings measured with ~~PI~~ in bucket
- 1505 ERS excavator operator continues excavating TP3 to a depth of 8 bgs.
- 1515 K5 collects sample TP3-2 from excavator bucket

- (1/25/12 (cont.))
sample TP3-2 contained in same containers as for TP2-2 and for stone analysis local parameters. K5 takes photos + air monitoring since as previously conducted.
TP3-2 includes sample for doxin / fine analysis ERS operator continues excavating TP3 to a depth of 10' bgs.
- 1530 K5 collects sample TP3-3 from the bucket of the excavator after taking photos + concluding air monitoring with PI's (110 m above logging mode).
- TP3 ERS operator backs off
- 1545 K5 updates F2L software with new sample info. + attempt to print sample labels + tags + Chain-of-custody K5 left 1/25/2012

1/25/12 (cont.)
(C-o-C) records. Glitch

with F2 L + F2R printer.
tag label text not lining
up properly or Avery labeled
and F2Z show a run time

error + will not allow
C-o-C record to print.

1630 K5 picks up sample info
in his scribble soft future
+ prints chart of custody
+ sample tags for VOCs
only in order to
make FedEx before
last pick up.

K5 locks up EPA field
office from her + heads
to FedEx near Newark
Airport.

K5 arrives at FedEx and
packs VOC samples
(Enclosed) for shipment
to lab.

1930 K5 shipped VOCs + returned
to Scott 1/25/12

1/25/12 (cont.)

to hotel.

Rita in the train

Kiver side Ave 3. Fe

- 1/26/12 (cont.)
- 0805 IC's arrived on site
Hans Preps for sampling activities
W. Father overcast,
light rain temps
in mid 30's (F) Calm.
- 0910 EKSS operator begins test p. 1 #4 (S)
(TP 4)
- 0915 Jason Scott (KS) of Tiba Tech (Tt)
collects sample TP4-1
from bucket of eggs excavated
sample collected from depth
of approx 4' eggs.
Soil collected w/ the ancore
sample for SOC analysis
+ true 8 oz jars work
filled for SVOC test, PCB
Herbicide + Dioxxy Furac
analysis. A 2 oz jar was
also filled for moisture
analysis to be included
w/ Encore samples
- 1/26/12 (cont.)
- 0920 Eric Spangler arrives
Excavating TP 4 to
depth of approx. 8' 6".
BS collects soil /
sample TP4-2 from
bucket of excavated
after taking photographs
+ screening soil with
PDS (mid rate 2000)
Elevated reading s > 100 m
measure of w/ pH P/D
soil & sample of sample
containers + Analytical
parameters for TP4-2
as for TP4-1 plus add'l
8-oz jar for nitrogen analysis

1/26/12 Bit in the Rain

Riverside Ave.

1/26/12 (cont.)

and one additional
2' 02" jar for
moisture
to be sent to Lancaster
lab w/ sample collected
for carbon analysis.

EKRS operator continues
excavating TP 4 to depth
of approx 10' bgs

0945 EKRS collects soil sample
TP 4 - 3 from backhoe
bucket. Same sample
containers and analytical
parameters as for TP 4 - 1.

EKRS operator begins
backfilling TP 4 with
material excavated
from test pit. Additives
full material needed
to properly compact dirt
placed back into test pit

1010 EKRS operator begins
excavating TP 5 (south east
corner of UST perimeter)

✓ 52 ft

Riverside Ave.

1/26/12 (cont.)

1020 4' depth reached in TP 5
KS collects soil sample
TP 5 - 1 from bucket of
Excavator. Soil from bucket
transferred into disposable
aluminum pan w/ disposable
plastic scoop. KS photographed
trench + soil in bucket
and soon bring vapors
above soil w/ PIB.

EKRS operator combined
the excavate to depth
of 8' bgs in TP 5
KS collects soil sample
TP 5 - 2 from bucket
of excavator. After
taking photos & air monitoring.
Sample containers filled

for VOC Analysis (3 encore
Stainless + 2 oz glass jar for
moisture, 6 VOC (8 oz glass)
PCP (8 oz glass) plus (8 oz glass
Herbicides 9 oz glass + Flexing
8oz + 2 oz

heat in the rain

~~flex soft~~

Leverett Ave. Drills (cont.)

10/26/12 (cont.)
Rough score over.

late drilby min. RAE 2000

reindig sticks on 319' down
+ inside water + loss battery.

measurement very not good
captured in data log (TPS-2)

ERSS operates - hits + breaks
water main while excavating
TPS-5. TPS-5 fills up w/ water
and begins to overflow.
ERSS crew hurried to build
concrete berm to prevent
water from flowing east and
off site into pasture lines.

ERSS excavation of seabor
drills cut vent between TPS-5
and open pit to the west
to channel water into open
pit.

DSC contacts City of Newark
to alert them about water
line break + to send crew to
shut off water main.

10/26/12
ERSS takes photos of TPS-5

✓ Scuff

11/26/2012 (cont.)

Filled with water + water
flowing out open excavation
11/15 KS prep stringer for
shopfront + lab while
ERSS + DPA worked with
water main break.

KS updated Scribe database
with samples collected + prepats
chain of custody record +
sample labels using scriber
program.

Two coolers used for packaging
of sample samples for shipment
to UL P Lab (A4 Sieve test).

11/16 KS departs site with
stringer + heads to Tech EC
after shopping to get 2 bags
of ice.

11/18 KS prepares bed & x Arbill,
A - cooler + while in Tech EC
packing lot + drops + shipment
abt @ Good Ex Comite.

✓ Scuff

Rite in the Rain

Keweenaw Ave.

1/26/2012 (cont.)

KS departs Felt (St. K.)

travel to & map: f.

Get additional colors

Needed for 1/27/12

Skidder arrives

KS checks back into hotel.

(checked at earlier assumption)

Sampling would be finished

1900

1/27/2012
KS checks out of
Cave but tree (Wenck)

& travels to site

0815 weather: light rain -

temp's near 50°F.

lit containers for trapping samples
that were not shipped to
AK Scarke left at 1/26/12

(inorganic sampler going to
HHS laboratory & lab X-1)
then sampler going to
Lancaster Laboratories.

1000 Ells operates container

excavation of test pit 705
to a depth of 10' by 1'

1015 KS collects soil sample
from excavator bucket
for TP 5-3 (10' by 3')

Same analytical parameters
& bottle dates as other 10' by 5'
samples.

1/27/12
KS off

Rain in the rain

✓ Skidder
1/26/12

- Riverside Ave site
- 1/22/12 (cont.)
- Tasks operator begins excavating test pit.
- TP 6 (south east side of west perimeter.
- TP 5 left open to allow city workers to enter excavator & evaluate broken weaker walls
- 1030 To take photos at excavation area by all TPC + broken weaker main in Test pit TP5.
- 1058 As collects soil sample from excavator bucket for location TP 6-1. Extra volume collected as this sample will be used for field + lab ac (held + dupl. core (TP 7-1) + ms/mss)
- Analytical parameters + container types are same as other samples collected from 4' by 4' depth interval.
- Although samples have

Riverside Ave site

- 1/22/12
- tripled because of field + lab ac.
- 1140 To take photos of soil / 1/2 excavator bucket collected at a depth of 8' by 4' test pit TP6.
- 1145 Be collect soil (sample TP 6-2 from day excavator bucket) for test pit TP 6-2 (8' by 4') Extra volume collected for this location as this location will also be a duplicate sample (TP 7-2). Analytical procedures + sample taken as types are same as other locations. Within the exception of the addition of short / long analysis at this location. Additional bottle was used for duplicate sample.
- ~~TP 6-2~~
- 1/27/12
- Bonnie